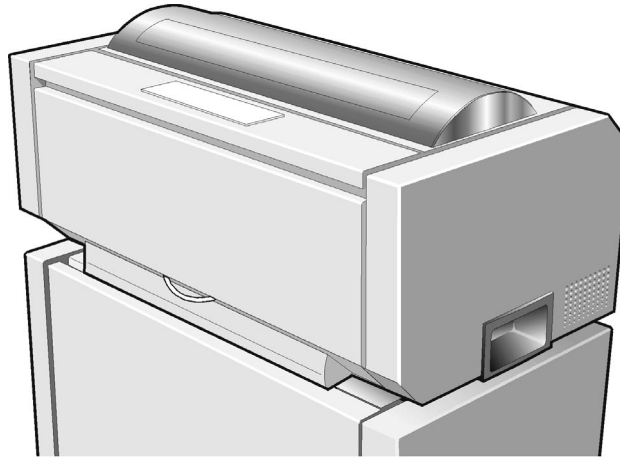


Model 3811

User's Manual



GENICOM[®]

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Getting to Know Your Printer

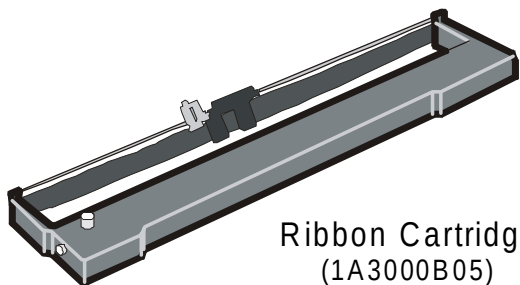
Printer Features

- 18 Needle Print Head
- 136 columns @ 10 cpi
- High Speed Draft printing at 1100 cps, LQ printing at 240 cps, DP Text printing at 480 cps
- IBM Proprinter XL III, EPSON FX and GENICOM ANSI emulations
- Multiple copies (1 original and 7 copies)
- Automatic paper path selection
- Easy operability via operator panel setup and SW commands
- Use of all specific features by means of the Specific Software Driver which is applicable to the most popular S/W Packages
- Centronics parallel interface and serial RS-232/C and RS-422/A interface
- Optional Ethernet 10/100 base T interface
- Color printing with the optional color ribbon cartridge

Unpacking Your Printer

Together with the CD-Rom with this *User's Manual*, the following items are included in the box:

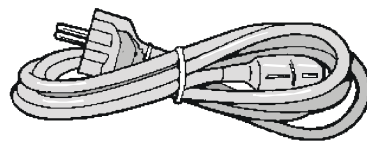
Notify any damage to your supplier.



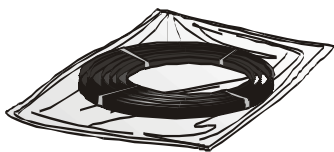
Ribbon Cartridge
(1A3000B05)



CD-Rom
(GEK-01001)



Power Cable



Repacking Strips



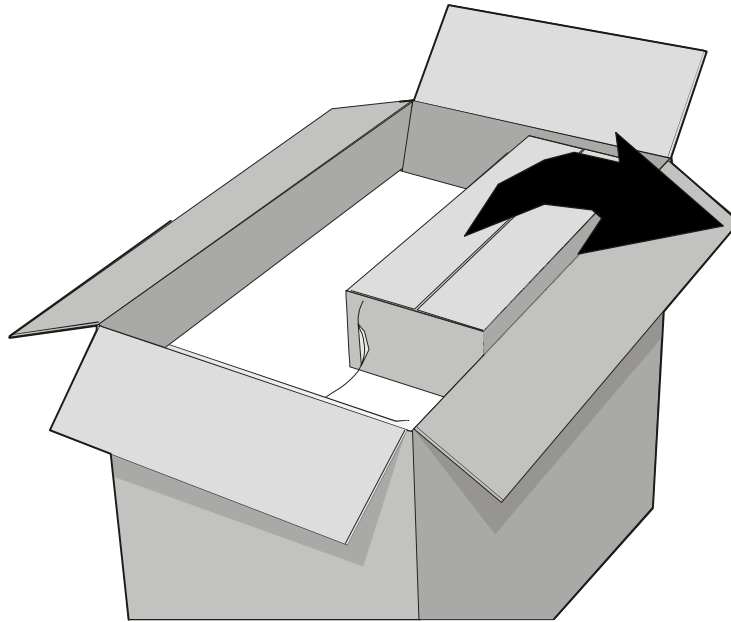
Quick Reference Guide
(GEK-01010)

Never remove any printer cover unless it is necessary for the installation of a printer accessory and expressly described in this manual.

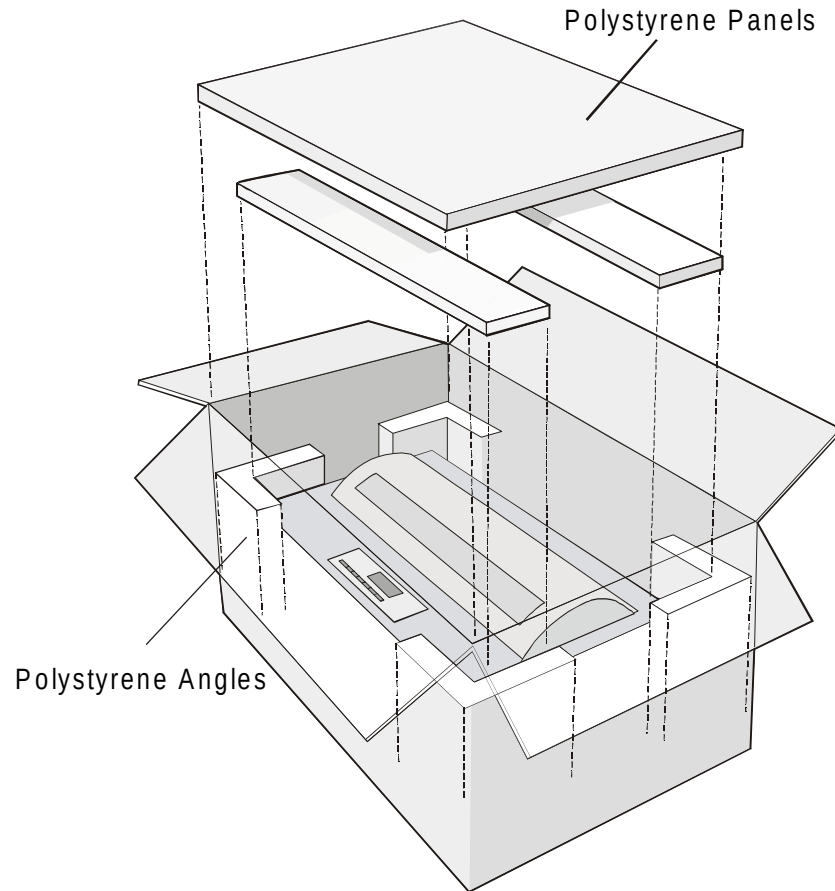
To unpack the printer proceed as follows:

Keep the packing material in a safe place. It must be used if you need to repack the printer for shipment.

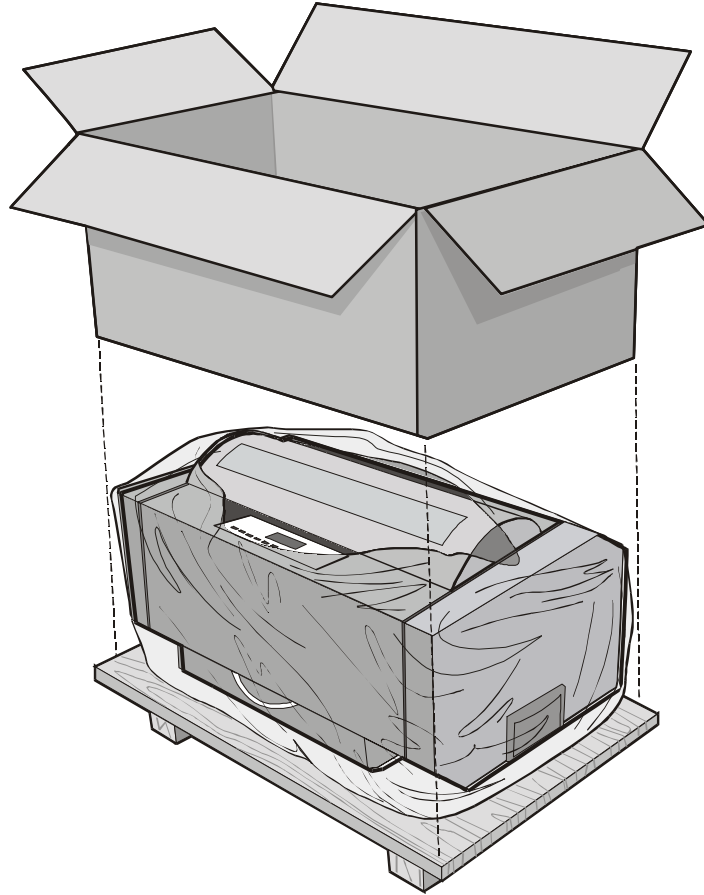
1. Bring the printer box near the final printer location.
2. Cut the packing ribbons.
3. Remove the ribbon cartridge box and the accessories out of the packing box.



4. Remove the polystyrene panels and the four polystyrene angles out of the packing box.

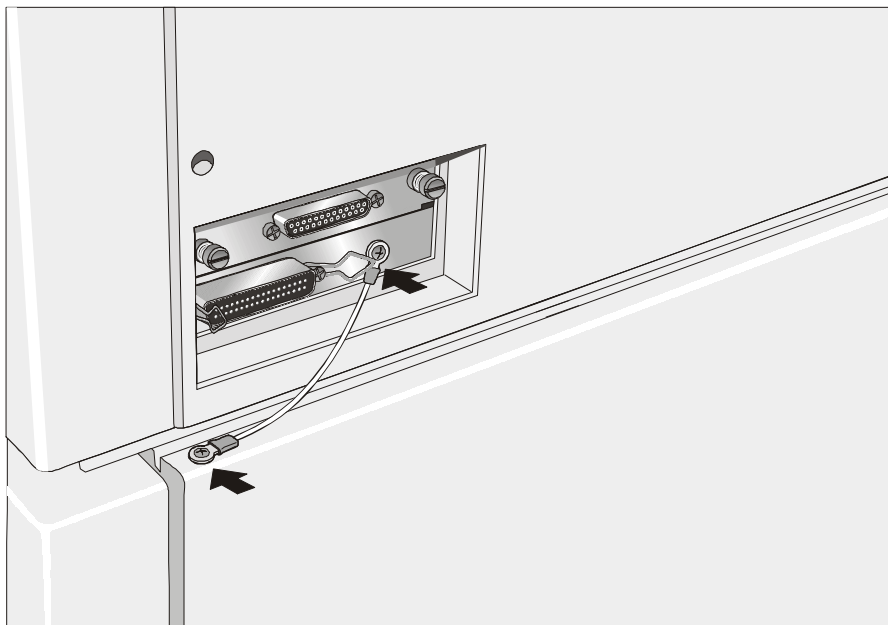


5. Slide the packing box off the printer.



6. Remove the plastic bag from the printer.
7. With the help of another person, move the printer to its final position.

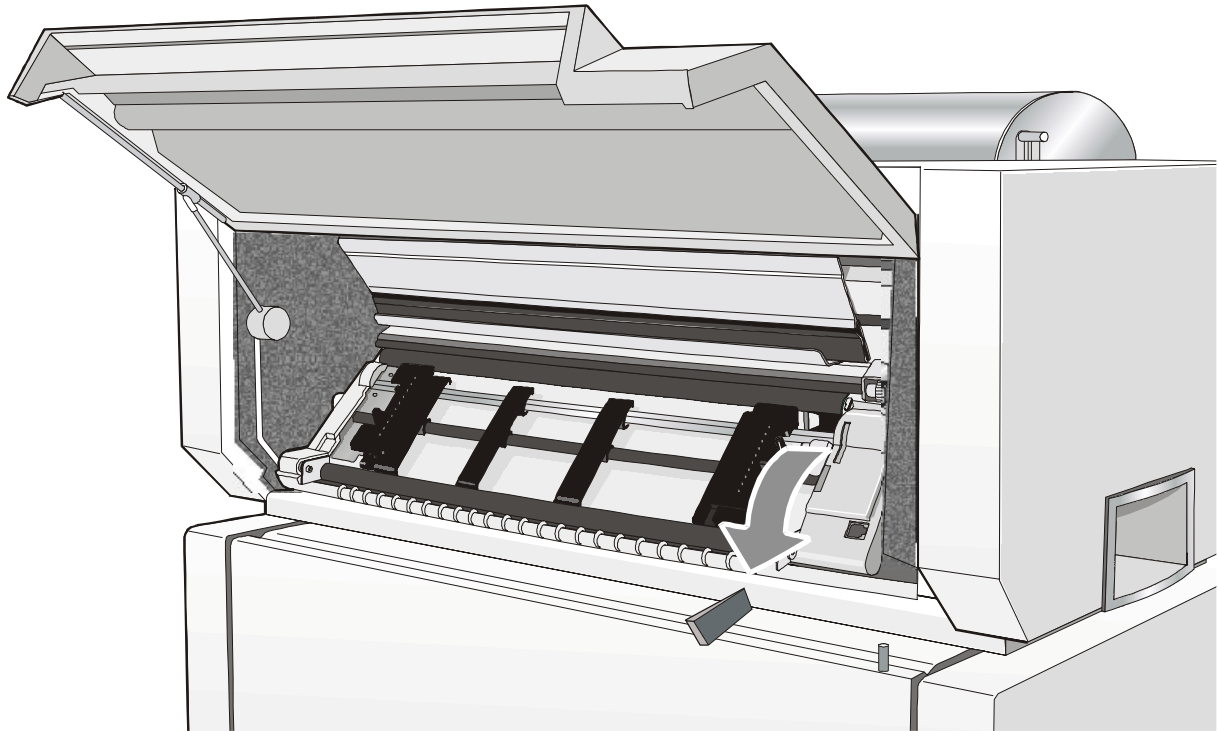
8. If the printer is installed on the printer cabinet option (1A3003B13), connect the ground cable on the rear side of the printer to the cabinet.



If the printer is installed on a table, it is not necessary to connect the ground cable.

Removal of the Shipment Locks

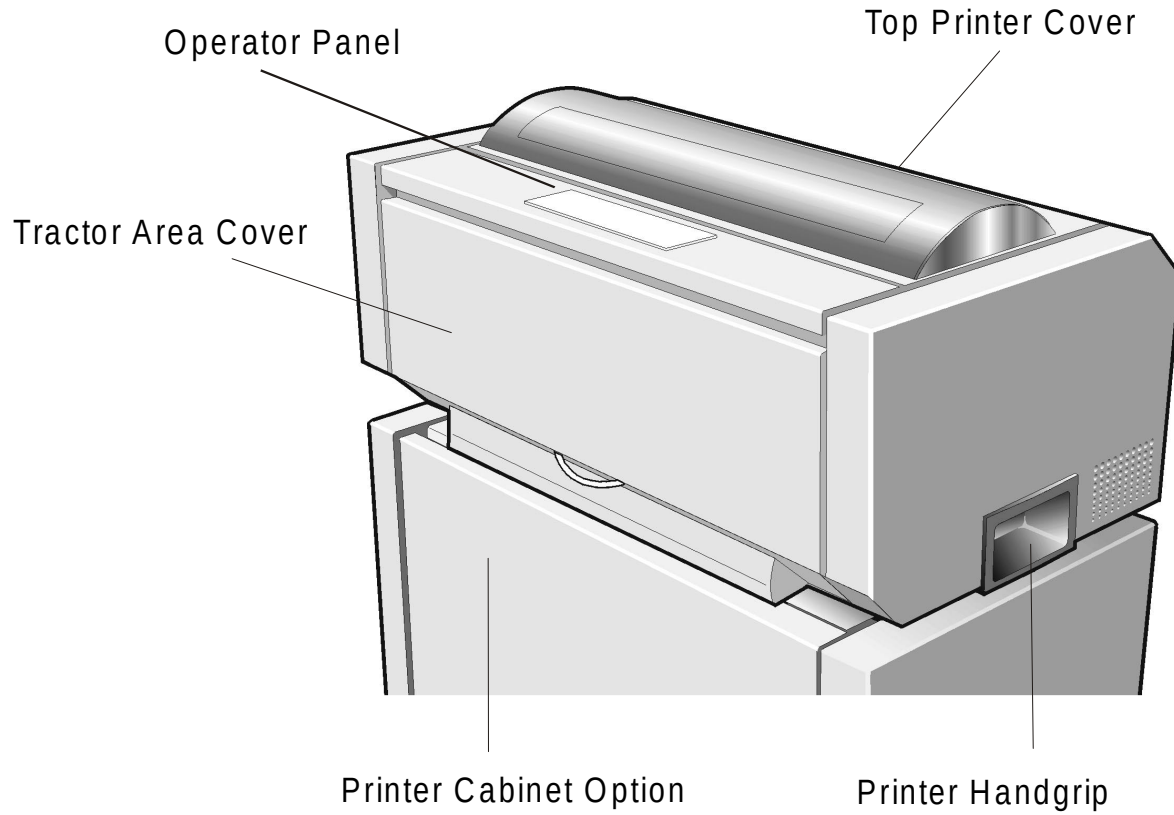
Open the printer tractor cover and make sure that you remove the shipment lock from the printer.



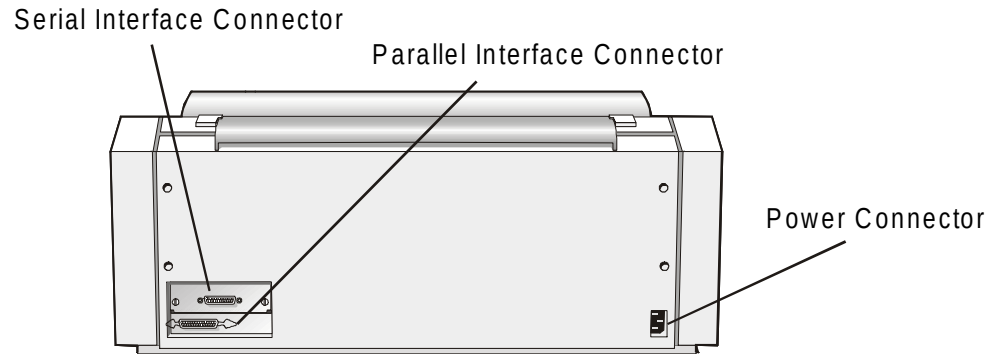
Keep the packing material in a safe place. It must be used if you need to repack the printer for shipment.

Printer Parts

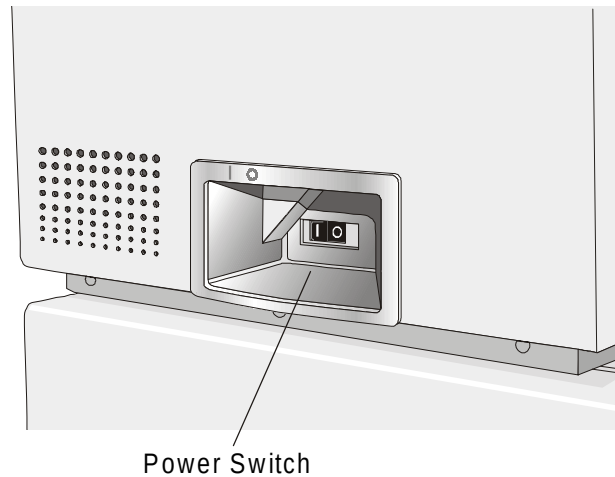
Front View



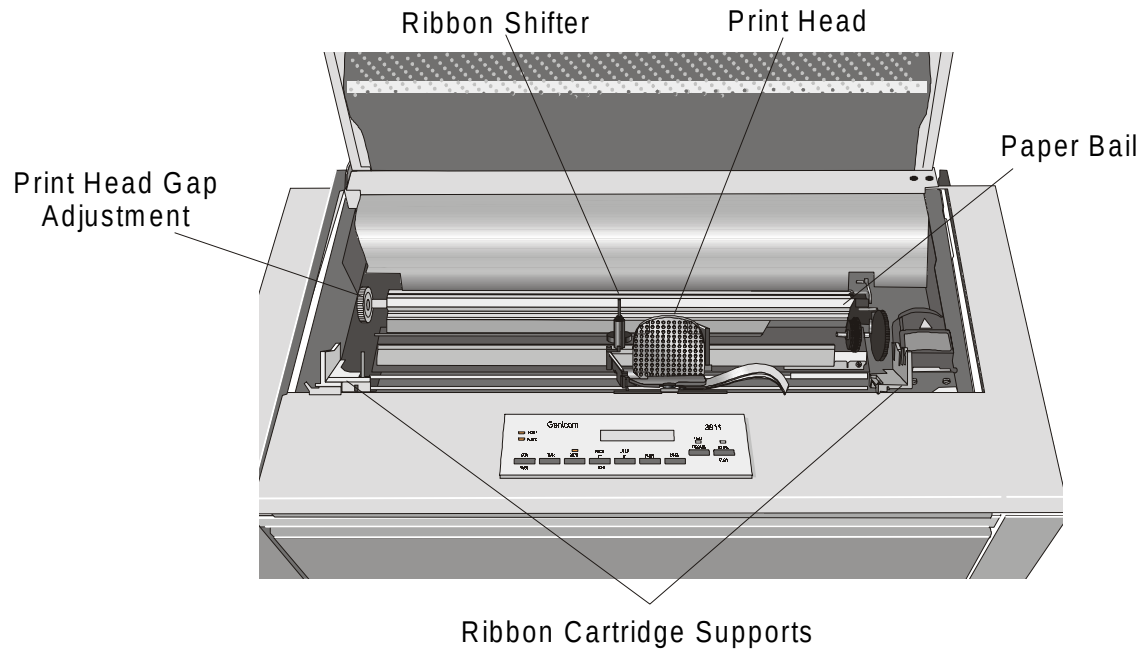
Rear View



Left Side View



Inside View



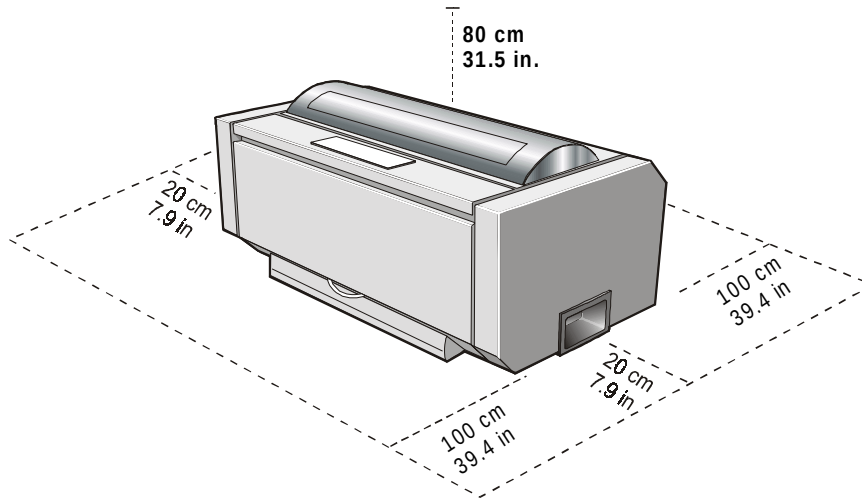
Setting Up Your Printer

Choosing a Suitable Location

Consider the following points when you choose the location for your printer:

- The distance between the printer and the host computer must not exceed the length of the interface cable;
- The location must be sturdy, horizontal and stable;
- Your printer must not be exposed to direct sunlight, extreme heat, cold, dust or humidity (see [Printer Specification](#) later);
- The power outlet must be compatible with the plug of the printer's power cord.

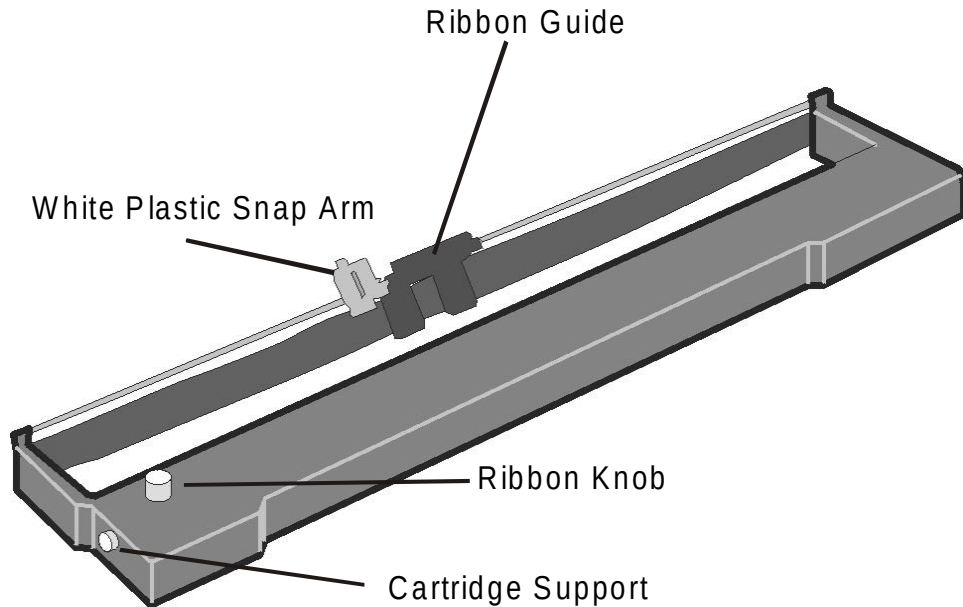
There must be sufficient clearances on all sides for easy operation. The required space is shown in the figure:



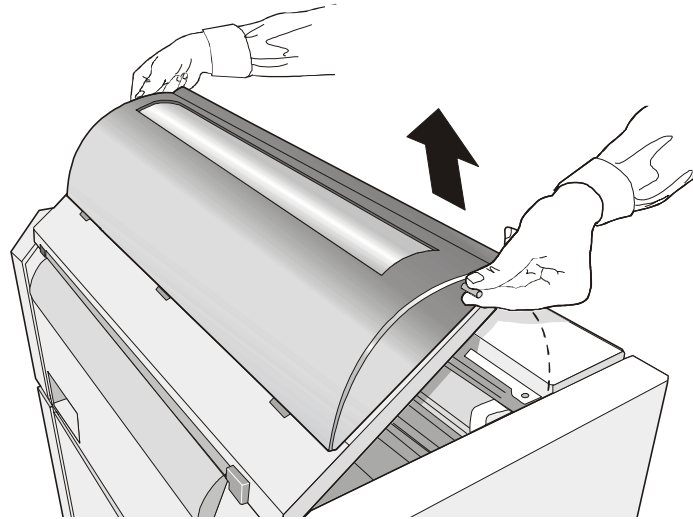
Ribbon Cartridge Installation

Make sure that you are using only **GENCOM** original consumables.

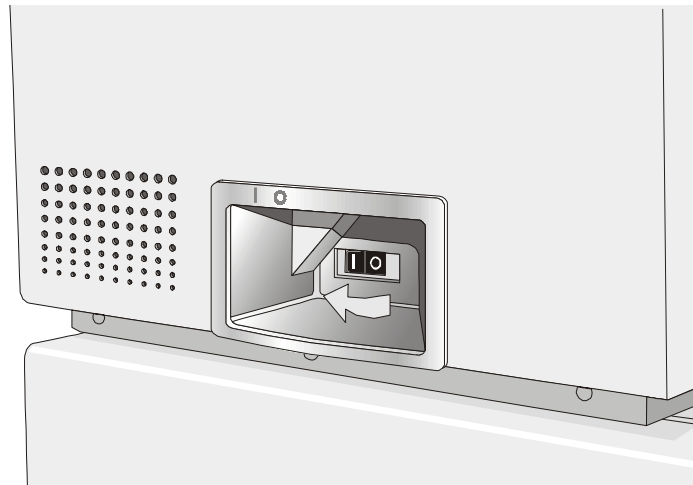
1. Make sure that the printer is turned off.
2. Find the ribbon cartridge (1A3000B05) among the accessories.



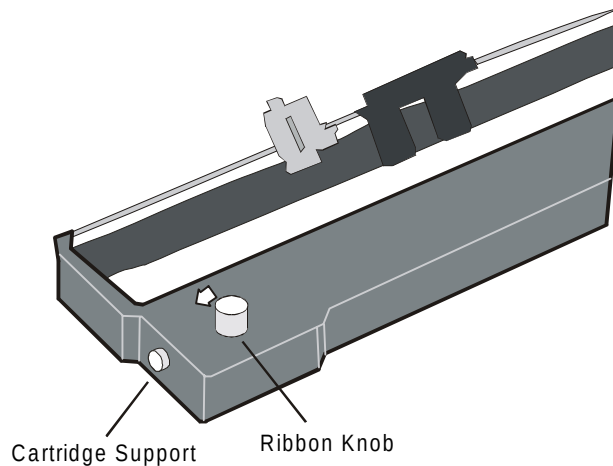
3. Open the top cover using the handles on the front side of the cover.



4. Turn the printer on. The print carriage initializes to a position for ribbon cartridge installation.

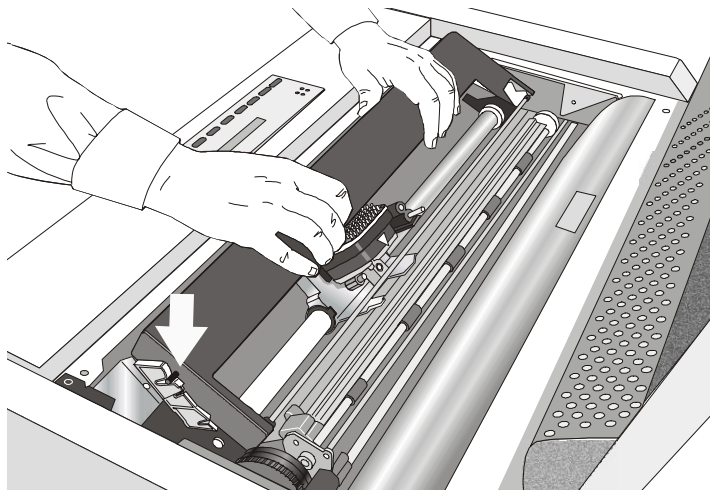


5. Before installing the ribbon cartridge turn the ribbon knob in the direction of the arrow (located on the cartridge) to take up slack in the ribbon.

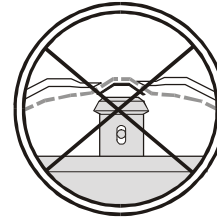
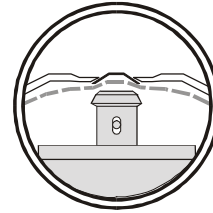
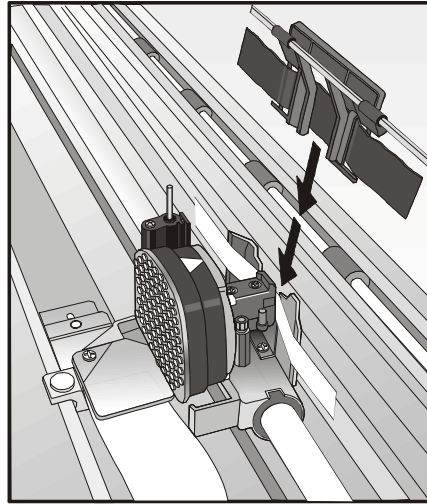


To avoid damage to the ribbon, do not turn the knob in the wrong direction.

6. Align the left and right cartridge supports with the printer mounting points.

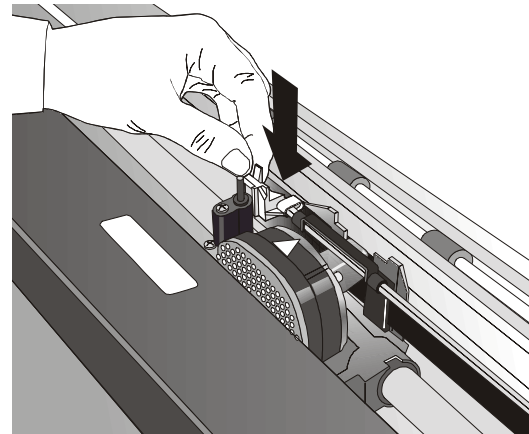


7. Slide and insert the ribbon guide between the print head and the ribbon guide mask holding it perpendicular to the print head.

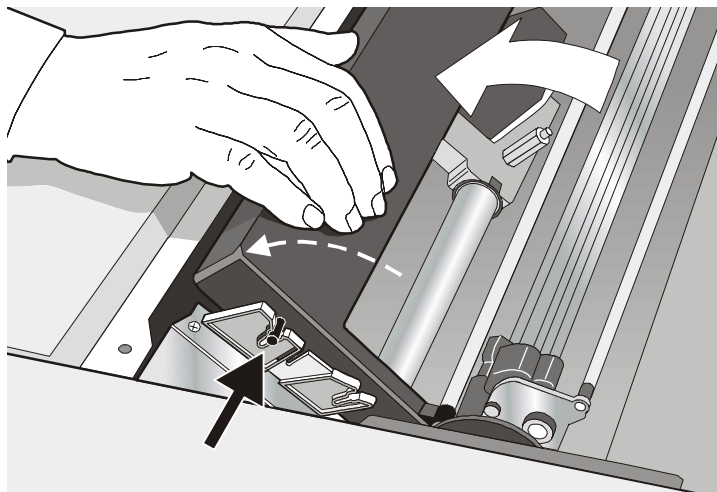


Make sure that the ribbon is inserted correctly between the print head and the print head mask.

8. Insert the white plastic snap arm onto the ribbon shifter as shown in this figure.



9. Turn the ribbon knob in the direction of the arrow (located on the cartridge) to take up slack in the ribbon.
10. Push the cartridge down gently until it snaps into place at both locking points.



11. Turn the ribbon knob again in the direction of the arrow to take up slack in the ribbon.
12. To ensure that the ribbon guide runs freely along the ribbon, manually move the print carriage horizontally.

If the used ribbon cartridge needs to be replaced, see [Replacing the Ribbon Cartridge](#) later in this *User's Manual*.

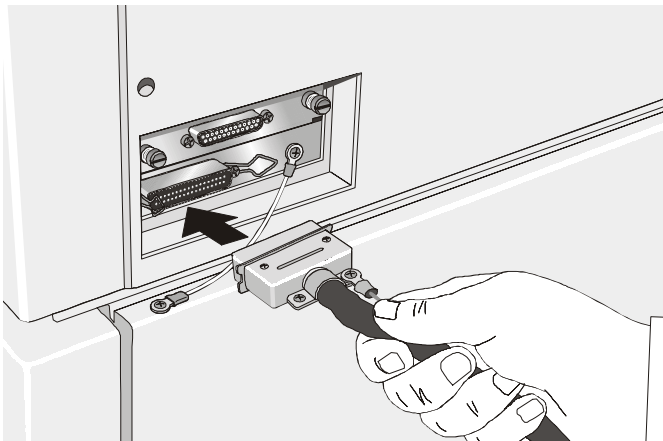
Host Computer Connection

This printer can be connected to the host computer via two available interfaces. The interface connectors are located on the rear of the printer.

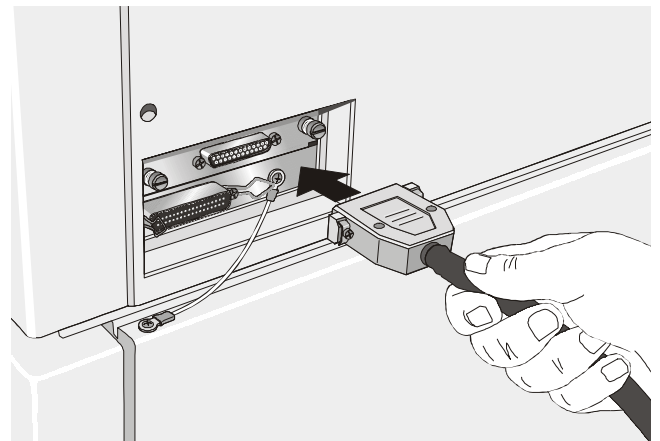
- A Centronics parallel interface
- A RS-232C/422A serial interface

Before connecting the interface cable, make sure that the printer and the host computer are turned OFF.

Insert the *parallel interface cable* into the parallel connector and fasten it by means of the clips. Insert the *serial interface cable* into the serial connector, and fix it fastening the two screws on both sides of the connector (use the screwdriver).



Parallel Interface



Serial Interface

Software Driver Selection

At this point it is necessary to configure the printer for the application package. The installation procedures depend upon the host environment. Install the printer driver as follows:

1. Insert the CD-Rom into the CD drive.
2. Select the language you prefer and press Next = > button.
3. Select Install Printer Driver, then press the Next = > button.
4. Select whether the printer should be installed as a local or remote printer, then press the Next = > button.
5. Press the Driver disk button.
6. Select the CD drive.
7. Select 3811 directory, then select the environment and the language for the printer driver that should be installed. Click OK button.
8. Select the printer port with which the printer is connected to the host.
9. At the end of the printer installation, you can print a Test Page to confirm that the printer is set up properly.

If you select to print the Test Page in Windows 2000 environment and the following message appears: “TEST PAGE FAILED TO PRINT. WOULD YOU LIKE TO VIEW THE PRINT TROUBLE SHOOTER FOR ASSISTANCE? OPERATION COULD NOT BE COMPLETED.” Click **NO button and select “PRINTING PROPRIETIES”. Check the selected paper format in the *PAPER AVAILABLE* field and select “PRINTING PREFERENCES” and then “ADVANCED”. In the *PAPER SIZE* field, select the same paper format that it is selected in the *PAPER AVAILABLE* field.**

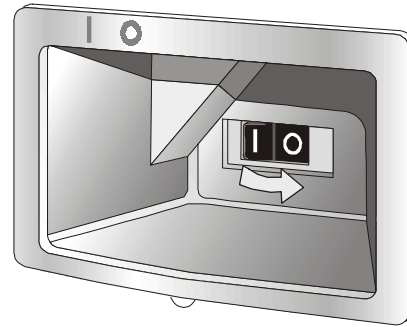
The printer drivers of **GENICOM** printers can be found at the Internet Address
<http://www.genicom.com/drivers/genicom.htm>

Power Connection

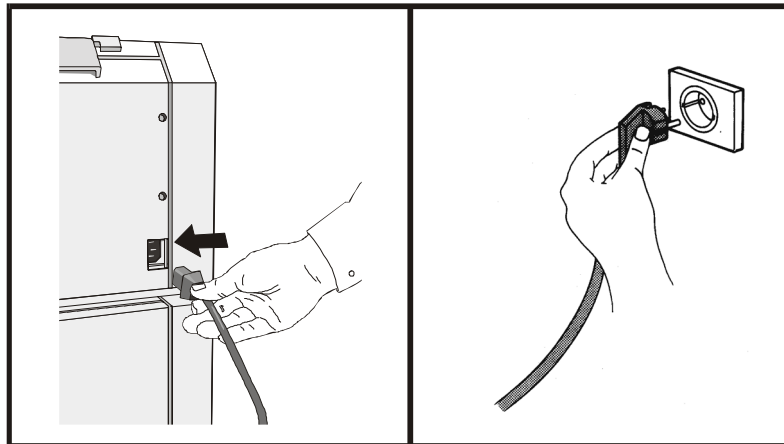
The power outlet must be compatible with the plug of the printer's power cord.

Always use a grounded outlet.

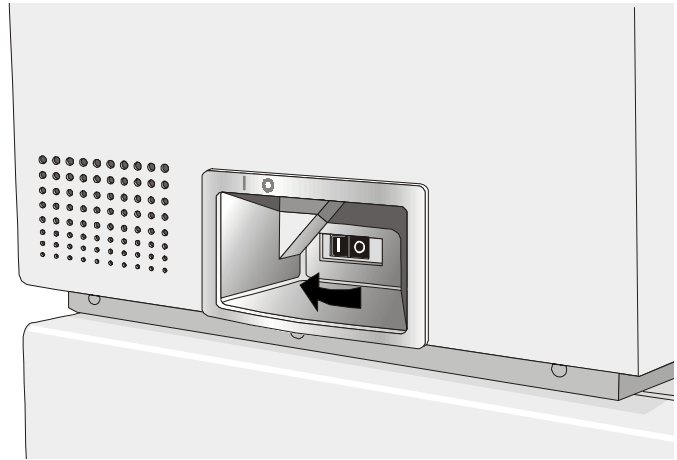
1. Make sure the power outlet is near the printer location and easily accessible.
2. Make sure that the power switch is in *0* position (OFF).



3. Insert the power cable plug into the printer connector and the other power cable end into a convenient outlet (the figure shows the European power cable).



4. If you need to turn the printer on, press the power switch in the *I* position (ON).



Selecting the Display Language

The display messages for the printer can be displayed in five different languages: English (Default), French, German, Italian and Spanish. To select the language, that you prefer, proceed as follows:

1. Hold the MENU key down on power up. The display shows:

STARTING UP

2. Shortly after the power comes up, the LCD displays the following message:

SYSTEM MENU

3. Release the MENU key. The LCD displays the first menu item:

CHARACTER SET

4. Now, press the ↓ key until the LCD language function displays:

LCD LANGUAGE

5. Press the ENTER key to enter this function.

6. Press the ↓ key to scroll the LCD languages:

LCD: ENGLISH

LCD: FRANCAIS

LCD: DEUTSCH

LCD: ITALIANO

LCD: ESPANOL

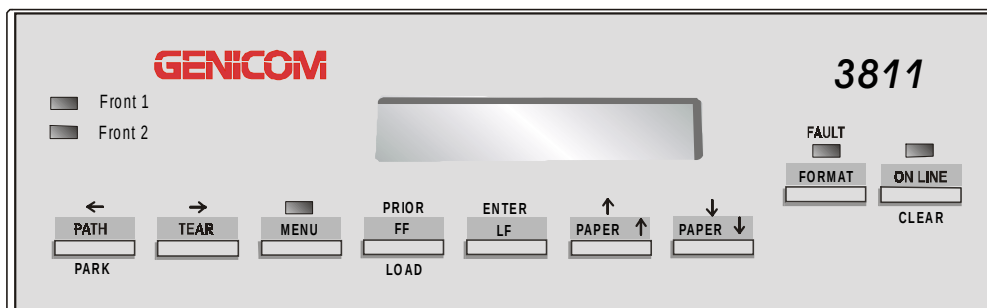
7. When the desired language is displayed, press the ENTER key again to select it.

8. Press the ON LINE key to exit menu.

Configuring the Printer

Operator Panel Presentation

The operator panel enables you to perform many of the printer functions including paper path selections, font selection and the printer setups. From the front of the printer, the operator panel is located on the right and appears as follows:



The operator panel consists of:

- A 16-character LCD (Liquid Crystal Display)
- Six led indicator lamps
- Nine function keys

LCD (Liquid Crystal Display)

The LCD shows the messages (up to 16 characters) regarding the print functions and the operating state of the printer. All display sets can be displayable in language specified by the LCD language selection of the *System Menu* (see [Selecting the Display Language](#) in this *User's Manual*).

Since words in some messages are abbreviated, be sure to carefully read the explanations found throughout this manual for their meanings.

LEDs

Indicate the On line status, fault condition and the current paper path.


ON LINE

On: the printer is On line.

Blinking: data is present in the input buffer and printer is in WAIT condition.

Off: the printer is Off line.

Located above ON LINE key.


MENU

On: the printer is in any menu.

Off: the printer is not in any menu.

Located above MENU key.

FAULT


On: the printer is in any error condition, including but not limited to: cover open, carriage stall, line feed motor stall, paper jam, paper out, serial interface framing/parity errors and buffer overflow.

Located above FORMAT key.

 **Front 1**

On: the Front1 paper path is selected.

Off: the Front1 paper path is not selected.

 **Front 2**

On: the Front2 paper path is selected (if the optional Front2 Push tractor assembly (1A3003B11) is installed).

Off: the Front2 paper path is not selected.

Key Functions

The operator panel keys have different functions depending on the printer's mode of operation. The modes of operation are:

- OFF LINE Mode
- ON LINE Mode
- MENU Mode
- POWER ON Mode
- TEAR OFF Mode

Some keys may be "locked" or have no function in a given mode. See **Selecting Key Lockout** in the *System Menu*.

ON LINE

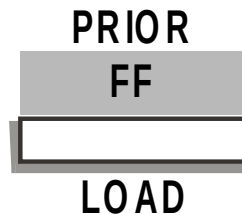
CLEAR

<i>STATUS</i>	<i>FUNCTION</i>
<i>Off Line</i>	Puts the printer in ON LINE condition. The ON LINE led is turned on and the LCD displays the name of the currently active format (FORMAT # x) or displays CURRENT if no format has been selected. In an error condition, if you press this key, the printer will clear the error and the LCD will display OFF LINE, if you press this key again the printer goes ON LINE.
<i>On Line</i>	Puts the printer in OFF LINE condition. The ON LINE led is turned off and the LCD displays OFF LINE.
<i>Menu</i>	Exits Menu and goes ON LINE. If the Menu was on a selection item and a change was made, then the selection will be updated accordingly; the LCD will display SAVING CHANGE and printer will exit Menu and go ON LINE.
<i>Power Up</i>	No action.
<i>Tear Off</i>	Same as OFF LINE or ON LINE.

Some keys may be "locked" or have no function in a given mode. See [Selecting Key Lockout](#) in the *System Menu*.

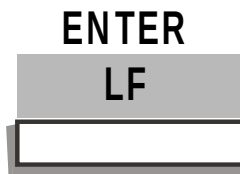
MENU

STATUS	FUNCTION
On Line	A configuration status report is displayed on the LCD by cycling through the current FONT STYLE, CPI, LPI, FORM LENGTH, EMULATION, PAPER PATH and INTERFACE.
Off Line	The printer will enter the <i>Operational Menu</i> and display the first menu item: FONT STYLE. (See The Operational Menu for details in this <i>User's Manual</i>).
Menu	Exits Menu and the printer goes OFF LINE. If the Menu was on a selection item and a change was made, then the selection will be updated accordingly, the LCD will display SAVING CHANGE and printer will exit Menu and go OFF LINE.
Power Up	The printer will enter the <i>System Menu</i> and display the first menu item: CHARACTER SET. (See The System Menu for details in this <i>User's Manual</i>).
Tear Off	No action.

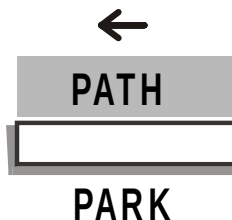


STATUS	FUNCTION
On Line	If the paper is loaded it will move to the top of the next form. If the paper has not been loaded, the paper will be loaded from the currently selected paper path.
Off Line	Same as if ON LINE.
Menu	Will cause the display to go back to the next higher level of the menu at the point it was entered. If you are at a selection level and a change has been made with the ↑ or ↓ key, then the change will NOT be saved and the display will go to the next item in the next higher level of the menu.
Power Up	If you press this key together with the LF key, the printer will enter the <i>Initial Set Up Menu</i> (ISU). See The Initial Set Up (ISU) Menu for details in this <i>User's Manual</i> .
Tear Off	If the paper is loaded it will move to the top of the next form at the tear off position.

Some keys may be "locked" or have no function in a given mode. See [Selecting Key Lockout](#) in the *System Menu*.



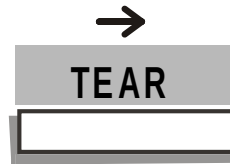
STATUS	FUNCTION
<i>On Line</i>	Causes the paper to advance one line at the currently selected line spacing increment, if you hold down this key more than one second a continuous line slew will occur at maximum rate.
<i>Menu</i>	Causes the Menu selection to go into the next lower level of the menu. If you are at a selection level and a change has been made with the PAPER ↑ or PAPER ↓ key, then the selection will be updated accordingly; the LCD will display SAVING CHANGE and then go to the next item in the next higher level. If no change has been made while at the selection level, then the display will go to the next item in the next higher level of the menu.
<i>Off Line</i>	Same as if ON LINE.
<i>Power Up</i>	When this key is pressed together with the FF/LOAD key, the printer will enter the <i>Initial Set Up Menu</i> (ISU).). See The Initial Set Up (ISU) Menu for details in this <i>User's Manual</i> .
<i>Tear Off</i>	No action.



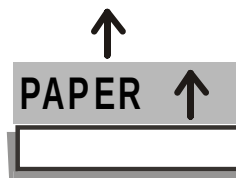
This key performs both "PARK" and "PATH SELECT" functions.

STATUS	FUNCTION
On Line	A first press will cause the current path to park the paper if another press of the key is not made within 1.5 seconds. The second key press within 1.5 seconds will cause the path selection to cycle with each additional press of the key and after 1.5 seconds of no key action, the paper will park in the current path, switch to the new path, and paper will be loaded. The printer will be Busy to the Host during this time until paper is successfully loaded and the printer is ON LINE.
Off Line	Same as ON LINE.
Menu	If PROGRAM UNITS: NUMERIC is selected (see Selecting Fixed or Numeric Program Units in the <i>System Menu</i>) and if at selection level of menu, the keystroke causes the LCD cursor to shift one segment to the left. If cursor is at leftmost position of the data modification field, then keystroke is ignored. If PROGRAM UNITS: FIXED is selected, then keystroke is ignored.
Power Up	No action.
Tear Off	Same as ON LINE.

Some keys may be "locked" or have no function in a given mode. See [Selecting Key Lockout](#) in the *System Menu*.

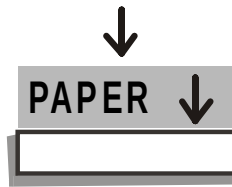


STATUS	FUNCTION
On Line	Causes the paper to advance to the Tear position from the current print position. (LCD will display PLEASE TEAR OFF). The paper will automatically retract to the current print position after a preset time.
Off Line	Same as ON LINE.
Menu	If PROGRAM UNITS:NUMERIC is selected (see Selecting Fixed or Numeric Program Units in the <i>System Menu</i>) and at selection level of menu, the keystroke causes the LCD cursor to shift one segment to the right. If cursor is at rightmost position of the data modification field, then keystroke is ignored. If PROGRAM UNITS:FIXED is selected, then keystroke is ignored.
Power Up	No action.
Tear Off	Terminates the Tear Off mode and causes the paper to retract to the current print position. If the tear off dimension was modified with the ↓ and ↑ keys then the new dimension is stored when this key is pressed.



STATUS	FUNCTION
On Line	Advances the paper by 1/180" (one step). If you press and hold this key more than 1 sec. the paper feed speed increases. The printer (similar to turning the paper knob) does not memorize paper advance using this key.
Off Line	Same as ON LINE function.
Menu	At the non-selection level, will cycle backward through the menu structure of each level of the menu. When you are on a "fixed" selection item, pressing this key will increase value (such as 1.0 to 1.5) or change the selection (such as DRAFT to COURIER). When you are on a "variable" selection item, pressing this key will increase the value at the LCD cursor position (e. g. 4 to 5).
Power Up	No action.
Tear Off	Causes the paper to move up for setting a new Tear Off distance. During tear-off, the LCD will display TEAR OFF ADJ and will increase value as the ↑ key is pressed. Paper will move 1/180 " with each press or will repeat if you hold down. New dimension is saved when the TEAR key is pressed or when tear off time-out occurs.

Some keys may be "locked" or have no function in a given mode. See [Selecting Key Lockout](#) in the *System Menu*.



<i>STATUS</i>	<i>FUNCTION</i>
<i>On Line</i>	Reverses the paper by 1/180" (one step). If you press and hold this key more than 1 sec. the paper feed speed increases. The printer (similar to turning the paper knob) does not memorize paper reverse using this key.
<i>Off Line</i>	Same as ON LINE function.
<i>Menu</i>	At the non-selection level, will cycle forward through the menu structure of each level of the menu. When you are on a "fixed" selection item, pressing this key will decrease the value (such as 1 . 5 to 1 . 0) or change the selection (such as DRAFT to COURIER). When you are on a "variable" selection item, pressing this key will decrease the value at the LCD cursor position (e. g. 5 to 4).
<i>Power Up</i>	No action.
<i>Tear Off</i>	Causes the paper to move down for setting a new Tear Off distance. During tear-off, the LCD will display TEAR OFF ADJ and will decrease value as the ↓ key is pressed. Paper will move 1/180 " with each press or will repeat if you hold down. New dimension is saved when the TEAR key is pressed or when tear off time-out occurs.

FORMAT



STATUS	FUNCTION
On Line	Same as OFF LINE.
Off Line	Basically, each key depression will toggle through the stored format numbers/names in order to allow user to simply change from one format to another. • The first press will cause the LCD display to indicate <code>SELECT CURRENT</code>. • If the key is not pressed again within 3 sec., the printer exits <i>Format</i> selection. • If the key is pressed again within 3 sec., then the next format number/name will be displayed. If the <code>FORMAT</code> key is not pressed again within 3 sec., then the format displayed is loaded, all format parameter values will be updated and the printer exits <i>Format</i> selection. • If the user cycles through the formats and the last one displayed is <code>CURRENT</code>, then no change will take place. If format names have been assigned, then they are displayed, else <code>FORMAT # x</code> is displayed where <code>x</code> is the default value assigned to a format.

STATUS	FUNCTION
---------------	-----------------

Menu	In the FORM THICKNESS (AUTO or FIXED) function (see Adjusting for the Thickness of Your Forms for details in this <i>User's Manual</i>), press the FORMAT key, the printer prints 3 rows of "H's". Pressing any other key will cause the tear position to move back to the original print line.
Power Up	No action.
Tear Off	No action.

Some keys may be "locked" or have no function in a given mode. See [Selecting Key Lockout](#) in the *System Menu*.

Printer Setups

The main printer setup parameters can be selected via the operator panel. The setup parameters are divided into three printer setups: the *System Menu*, the *Operational Menu* and the *Initial Set-up Menu*.

System Menu Allows configuration of parameters that are not used on a day-to-day basis. For example, printer response to CR code, interfaces type and code page selection.

Operational Menu Allows you to set various print mode parameters that are useful in your day-to-day job. For example: font character pitch and margins (left/right and top/bottom).

As new selections are made using the *System* and *Operational Menus*, there may come a time when the condition of the printer parameters is too confusing or is not what they are expected them to be. When this happens, an Initial Setup (ISU) may be executed:

Initial Set-up Menu The main purpose of this menu is to provide the user with a way to get the printer back to a known state.
All *System/Operational Menu* values are restored to the factory default settings except ALIGNMENT and SENSOR TUNE functions (and RIBBON function of the *System Menu*).

Menu Structure

The menus are structured in an outline format:

Primary level for main headings

Secondary levels for parameter selection

In the LCD:

- The primary "level" of the menu is in the leftmost and successive "levels" are tabbed accordingly.
- The flashing serves to indicate that you are at the "selection" or "change" level.
- The mark " >" (greater than) symbol in the display message indicates the current default value.
- The convention that will be used during the parameter description selections is the following one:

LCD MESSAGE	Key to be pressed
-------------	-------------------

The Initial Set-Up (ISU) Menu

There are three primary headings in the *Initial Set Up Menu* as shown below. Each primary heading has one or two levels below it:

1. INITIALIZE
2. ALIGNMENT
3. SENSOR TUNE

Entering Initial Set-Up Menu

To enter the *Initial Set-Up Menu*, proceed as follows:

1. Turn off the printer's power.
2. Press and hold the LINE FEED and FF/LOAD keys.
3. While holding these keys, turn on the printer's power. Shortly, after the power comes up, the LCD displays the following message:

INITIAL MENU

4. Release the LINE FEED and FF/LOAD keys. The LCD displays the first menu item:

INITIALIZE

Moving within the Initial Set-Up Menu

1. Press the ENTER key to go into the next Front1 level of the menu.
2. Use the ↑ or the ↓ keys to scroll within a level as well as to change parameter value display at the selection level.
3. Press the ENTER key to save selections at the selection level (SAVING CHANGE displays). The selection level is apparent whenever the LCD is flashing on and off.
4. Use the PRIOR key to go to the next higher level as well as to not save a selection at the selection level.

Selecting the Initialization

This function restores all *System* and *Operational Menu* values to the factory default settings:

NO: no changes made.

INT: initializes all menu values to the International settings.

DOM: initializes all menu values to the US settings.

AFP: initializes all menu values of special applications.

INITIALIZE	ENTER
INIT:NO	↓
INIT:INT	↓
INIT:DOM	↓
INIT:AFP	↓

Selecting the Alignment (Print Wire Flight Time)

If the currently displayed value is changed, then the flight time setting changes. Pressing the FORMAT key causes 3 rows of H's to be printed; the paper moves to the view position and paper returns to the original print position when the FORMAT key is pressed. The alignment value is stored by exiting the *Initial Setup Menu* by pressing the MENU key. The alignment value is not affected by ISU. The value selected is applied to all paper paths.

ALIGNMENT	ENTER	ALIGN: - 6	↓
ALIGN>0	↓	ALIGN: - 5	↓
ALIGN: 1	↓	ALIGN: - 4	↓
ALIGN: 2	↓	ALIGN: - 3	↓
ALIGN: 3	↓	ALIGN: - 2	↓
ALIGN: 4	↓	ALIGN: - 1	↓
ALIGN: 5	↓		
ALIGN: 6	↓		

Tuning the Paper Sensors

This function checks the ambient light level of the optical paper sensors and stores a reference value.

Y: checking takes place (Sensors Tuning is displayed).

N: no checking takes place.

SENSOR TUNE	ENTER
TUNE>N	↓
TUNE:Y	↓

**Before selecting this function (TUNE>Y), make certain that paper is removed from all paper paths.
Failure to remove paper during tuning will result in incorrectly tuned sensors.**

Leaving Initial Set-Up Menu

To exit the *Initial Set Up Menu* press the MENU key and the printer leaves this Menu.

The System Menu

There are 15 primary headings in the *System Menu* as shown below. Each primary heading has one or two levels below it:

1. CHARACTER SET
2. NATIONAL SET
3. CHARACTER TABLE
4. LCD LANGUAGE
5. IBM OPTIONS
6. ANSI OPTIONS
7. OTHER OPTIONS
8. BUFFER SETUP
9. INTERFACE
10. PARALLEL OPTIONS
11. SERIAL OPTIONS or LAN OPTIONS
12. KEY LOCKOUT
13. PATH/FORMAT
14. PROGRAM UNITS
15. PRINT STATUS

Entering System Menu

To enter the *System Menu*, proceed as follows:

1. Hold the MENU key down on power up.
2. Shortly, after the power comes up, the LCD displays the following message:

SYSTEM MENU

3. Release the MENU key. The LCD displays the first menu item:

CHARACTER SET

Moving within the System Menu

1. Press the ENTER key to go into the next lower level of the menu.
2. Use ↑ or the ↓ keys to scroll within a level as well as to change parameter value display at the selection level.
3. Press the ENTER key to save selections at the selection level (SAVING CHANGE displays). The selection level is apparent whenever the LCD is flashing on and off.
4. Use the PRIOR key to go to the next higher level as well as to not save a selection at the selection level.

Selecting the Character Set for an Emulation

Select a character set for emulation: EPSON, IBM or ANSI.

CHARACTER SET

Epson Emulation

To change the character set in the Epson emulation, press the ENTER key to go from the top level to the second level as shown below:

CHARACTER SET	ENTER
CHR: EPSON	ENTER
CHR:E>ITALIC	↓
CHR:E:CS1	↓
CHR:E:CS2	↓

IBM Emulation

To change the character set in the IBM emulation, press the ENTER key to go from the top level to the second level as shown below:

CHR: IBM	ENTER
CHR:I>CS1	↓
CHR:I:CS2	↓

ANSI Emulation

To change the character set in the ANSI emulation, press the ENTER key to go from the top level to the second level as shown below:

CHR: ANSI	ENTER
CHR:A>CS1	↓
CHR:A:CS2	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (NATIONAL SET displays).

Selecting the National Set for an Emulation

Select a national set for the EPSON and ANSI emulations only.

NATIONAL SET

Epson Emulation

To change the national set in the Epson emulation, press the ENTER key to go from the top level to the second level as shown below:

NATIONAL SET	ENTER	NATL:E:LATIN AME	↓
NATL: EPSON	ENTER	NATL:E:KOREA	↓
NATL:E>USA	↓	NATL:E:LEGAL	↓
NATL:E:FRANCE	↓	NATL:E:NETHERLAN	↓
NATL:E:GERMANY	↓	NATL:E:ANGLO-UNI	↓
NATL:E:UK	↓	NATL:E:S. AMERICA	↓
NATL:E:DENMARK 1	↓	NATL:E:PORTUGAL	↓
NATL:E:SWEDEN	↓	NATL:E:AFRICA	↓
NATL:E:ITALY	↓	NATL:E:SWISS	↓
NATL:E:SPAIN 1	↓	NATL:E:TURKEY	↓
NATL:E:JAPAN	↓	NATL:E:GREECE	↓
NATL:E:NORWAY	↓	NATL:E:YUGOSLAV	↓
NATL:E:DENMARK 2	↓	NATL:E:CYRILLIC	↓
NATL:E:SPAIN 2	↓		

ANSI Emulation

To change the character set in the ANSI emulation, press the ENTER key to go from the top level to the second level as shown below:

NATL:	ANSI	ENTER	NATL:A:DAN/NOR C	↓
NATL:A>USA		↓	NATL:A:DAN/NOR D	↓
NATL:A:GERMANY		↓	NATL:A:SWE/FIN A	↓
NATL:A:FRANCE A		↓	NATL:A:SWE/FIN B	↓
NATL:A:FRANCE B		↓	NATL:A:SWE/FIN C	↓
NATL:A:FREN/CANA		↓	NATL:A:SWE/FIN D	↓
NATL:A:DUTCH		↓	NATL:A:SWISS	↓
NATL:A:ITALY		↓	NATL:A:YUGOSLAV	↓
NATL:A:UK		↓	NATL:A:UK A	↓
NATL:A:SPAIN		↓	NATL:A:TURKEY	↓
NATL:A:DAN/NOR A		↓	NATL:A:GREEK	↓
NATL:A:DAN/NOR B		↓	NATL:A:CYRILLIC	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (CHARACTER TABLE displays).

Selecting Character Table for an Emulation

Select a character table for emulation: EPSON, IBM or ANSI.

CHARACTER TABLE

Epson Emulation

To change the character table in the Epson emulation, press the ENTER key to go from the top level to the second level as shown below:

CHARACTER TABLE	ENTER	TBL:E:ISO-3	↓
TBL: EPSON	ENTER	TBL:E:ISO-4	↓
TBL:E>CODE437	↓	TBL:E:ISO-5	↓
TBL:E:CODE850	↓	TBL:E:ISO-6	↓
TBL:E:CODE851	↓	TBL:E:ISO-7	↓
TBL:E:CODE852	↓	TBL:E:ISO-8	↓
TBL:E:CODE853	↓	TBL:E:ISO-9	↓
TBL:E:CODE855	↓	TBL:E:ISO-15	↓
TBL:E:CODE858	↓	TBL:E:MAZOWIA	↓
TBL:E:CODE860	↓	TBL:E:TURKISH	↓
TBL:E:CODE863	↓	TBL:E:GREEK	↓
TBL:E:CODE864	↓	TBL:E:ROMAN-8	↓
TBL:E:CODE865	↓	TBL:E:KAMENICKY	↓
TBL:E:CODE866	↓	TBL:E:CWI	↓
TBL:E:CODE867	↓	TBL:E:IN2	↓
TBL:E:ISO-1	↓	TBL:E:CODE864E	↓
TBL:E:ISO-2	↓	TBL:E:CODE1250	↓

IBM Emulation

To change the character table in the IBM emulation, press the ENTER key to go from the top level to the second level as shown below:

TBL: IBM	ENTER	TBL:I:ISO-4	↓
TBL:I>CODE437	↓	TBL:I:ISO-5	↓
TBL:I:CODE850	↓	TBL:I:ISO-6	↓
TBL:I:CODE851	↓	TBL:I:ISO-7	↓
TBL:I:CODE852	↓	TBL:I:ISO-8	↓
TBL:I:CODE853	↓	TBL:I:ISO-9	↓
TBL:I:CODE855	↓	TBL:I:ISO-15	↓
TBL:I:CODE858	↓	TBL:I:MAZOWIA	↓
TBL:I:CODE860	↓	TBL:I:TURKISH	↓
TBL:I:CODE863	↓	TBL:I:GREEK	↓
TBL:I:CODE864	↓	TBL:I ROMAN-8	↓
TBL:I:CODE865	↓	TBL:I:KAMENICKY	↓
TBL:I:CODE866	↓	TBL:I:CWI	↓
TBL:I:CODE867	↓	TBL:I:IN2	↓
TBL:I:ISO-1	↓	TBL:I:CODE864E	↓
TBL:I:ISO-2	↓	TBL:I:CODE1250	↓
TBL:I:ISO-3	↓		

ANSI Emulation

To change the character table in the ANSI emulation, press the ENTER key to go from the top level to the second level as shown below:

TBL: ANSI	ENTER	TBL:A:ISO-4	↓
TBL:A>CODE437	↓	TBL:A:ISO-5	↓
TBL:A:CODE850	↓	TBL:A:ISO-6	↓
TBL:A:CODE851	↓	TBL:A:ISO-7	↓
TBL:A:CODE852	↓	TBL:A:ISO-8	↓
TBL:A:CODE853	↓	TBL:A:ISO-9	↓
TBL:A:CODE855	↓	TBL:A:ISO-15	↓
TBL:A:CODE858	↓	TBL:A:MAZOWIA	↓
TBL:A:CODE860	↓	TBL:A:TURKISH	↓
TBL:A:CODE863	↓	TBL:A:GREEK	↓
TBL:A:CODE864	↓	TBL:A:ROMAN-8	↓
TBL:A:CODE865	↓	TBL:A:KAMENICKY	↓
TBL:A:CODE866	↓	TBL:A:CWI	↓
TBL:A:CODE867	↓	TBL:A:IN2	↓
TBL:A:ISO-1	↓	TBL:A:CODE864E	↓
TBL:A:ISO-2	↓	TBL:A:CODE1250	↓
TBL:A:ISO-3	↓		

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (LCD LANGUAGE displays).

Selecting the LCD Language

Select the desired language of your choice from the list below.

LCD LANGUAGE

To change the LCD language selection, press the ENTER key to go from the top level to the second level as shown below:

LCD LANGUAGE	ENTER
LCD>ENGLISH	↓
LCD:FRANCAIS	↓
LCD:DEUTSCH	↓
LCD:ITALIANO	↓
LCD:ESPANOL	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (IBM OPTIONS displays).

Selecting IBM Emulation Options

Select the IBM emulation specific options as shown below.

IBM OPTIONS

To change the IBM options, press the ENTER key to go from the top level to the second level as shown below. There are two options that can be specified.

Compressed Character Pitch

If the printer receives a command (SI) from the host to print in compressed pitch, then the printer will print in 17 or 20.

IBM OPTIONS	ENTER
IBM: COMP CHR	ENTER
IBM:COMP CHR>17	↓
IBM:COMP CHR:20	↓

Automatic Carriage Return

If the printer receives a command (LF) from the host to perform a line feed, then the printer will (Y) or will not (N) append a carriage return based upon your selection.

IBM: AUTO CR	ENTER
IBM:AUTO CR>N	↓
IBM:AUTO CR:Y	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (ANSI OPTIONS displays).

Selecting the ANSI Emulation Options

Select ANSI emulation specific options as shown below.

ANSI OPTIONS

To change the ANSI options, press the ENTER key to go from the top level to the second level as shown below. There are 12 options that can be specified:

Reset Enable

If the printer receives a command (ESC c) from the host to reset the printer, then the printer will (Y) or will not (N) reset the current configuration to the power-up configuration.

ANSI OPTIONS	ENTER
ANS: RIS ENABLE	ENTER
ANS:RIS ENBL>Y	↓
ANS:RIS ENBL:N	↓

SI/SO Control

If the printer receives a command (SI or SO) from the host to enable or disable the special modes (oversize, expanded and bar code modes), then the printer will (Y) or will not (N) respond to the <SI> and <SO> commands based upon your selection.

ANS: SI/SO CTL	ENTER
ANS:SI/SO CTL>N	↓
ANS:SI/SO CTL:Y	↓

Auto Carriage Return

If the printer receives a command (LF) from the host to perform a line feed then the printer will (Y) or will not (N) append a carriage return based upon your selection.

ANS: AUTO CR	ENTER
ANS:AUTO CR>N	↓
ANS:AUTO CR:Y	↓

Prime on Delete

If the printer receives a command (DEL) from the host, then the printer will (Y) or will not (N) perform a prime (reset) based upon your selection.

ANS: PRIME ON DEL	ENTER
ANS:PRIME ON>N	↓
ANS:PRIME ON:Y	↓

Control Codes in Dot Graphics

If the printer receives a control code from the host while in dot graphics mode, then the printer will (Y) or will not (N) respond to the particular control code based upon your selection.

ANS: CONTRL IN DG	ENTER
ANS:CTRL DG>Y	↓
ANS:CTRL DG:N	↓

Vertical Expansion

This setting defines the vertical expansion from the baseline up (Y) or from the top line down (N).

```
ANS: EXPAND UP      ENTER
ANS:EXPAND UP>Y      ↓
ANS:EXPAND UP:N      ↓
```

AGM

If is selected N: the 6-bit graphics horizontal densities are multiplies of 72.

If is selected Y: the 6-bit graphics horizontal densities are multiplies of 60.

```
ANS: ALT GRAPHICS   ENTER
ANS:AGM>N           ↓
ANS:AGM:Y           ↓
```

8-bit Control

If the printer receives a control code command (80H to 9FH) whose eighth data bit is set, and the character set is selected, then the printer will (Y) or will not (N) respond to the particular code based upon your selection.

```
ANS: 8 BIT CTRL     ENTER
ANS:8BIT CTL>N      ↓
ANS:8BIT CTL:Y      ↓
```

ENQ Code Enable

1: enables printer response to <ENQ> and enables type 1 download sequence.

2: enables printer response to <ENQ> and enables type 2 download sequence.

NO: printer does not respond to <ENQ> code.

See "ANSI Emulation Commands" for additional information in the *Programmer's Manual* on the CD-Rom.

ANS: ENQ CODE ENTER

ANS: ENQ CODE>NO ↓

ANS: ENQ CODE:1 ↓

ANS: ENQ CODE:2 ↓

Superscript/Subscript Character Enable

The printer will (Y) or will not (N) respond to ESC [2 m and ESC [3 m commands.

ANS: S/SUB SCRIPT ENTER

ANS: S/SUB SC>N ↓

ANS: S/SUB SC:Y ↓

ESC+Control Code

In this setting the control codes imbedded within escape sequence are valid (Y) or ignored (N). In both cases, the escape sequence will be valid.

ANS: ESC+CTRLCODE ENTER

ANS: ESC+CTRL>N ↓

ANS: ESC+CTRL:Y ↓

VT Code

In this setting the VT code received without tab set will yield line feed (Y) or will be ignored (N).

ANS: VT NOT SET ENTER

ANS:VT NOT SET>Y ↓

ANS:VT NOT SET:N ↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (OTHER OPTIONS).

Selecting Global Emulation Options

Select emulation non-specific options as shown below.

OTHER OPTIONS

To change the options that pertain to all emulations, press the ENTER key to go from the top level to the second level as shown below. There are 22 options that can be specified:

Automatic Line Feed

If the printer receives a command (CR) from the host to execute a carriage return, then the printer will (Y) or will not (N) also execute a line feed based upon your selection.

OTHER OPTIONS	ENTER
OPT: AUTO LF	ENTER
OPT:AUTO LF>N	↓
OPT:AUTO LF:Y	↓

Double Line Feed

If the printer receives a command (LF) from the host to execute a line feed, then the printer will (Y) or will not (N) also perform double line feed based upon your selection.

OPT: DOUBLE LF	ENTER
OPT:DOUBLE LF>N	↓
OPT:DOUBLE LF:Y	↓

Automatic Wrap

If the printer receives printable data from the host, and such data exceeds the current line length (right margin), then the printer will (Y) or will not (N) continue to print the remaining data on the following line based upon your selection.

If you disable auto wrap by selecting N, then the data beyond the right margin is discarded up to the next line terminator.

OPT: AUTO WRAP	ENTER
OPT:AUTO WRAP>Y	↓
OPT:AUTO WRAP:N	↓

Automatic Tear Off

Y: If the printer is at the TOF

- and there is no data received after 1.5 sec., the paper will automatically advance to the tear-off position.
- if data is received, then the printer will sound 4 beeps (approx. 0.25 sec. apart), retract the paper to the last print position and continue to print. If you press the TEAR key tear off retraction is executed.

N. Tear off only occurs if the TEAR key is pressed.

OPT: AUTO TEAR	ENTER
OPT:AUTO TEAR>N	↓
OPT:AUTO TEAR:Y	↓

Retract Timer

If you have pressed the TEAR key to move paper to the tear-off position, then the length of time that the printer waits before retracting the paper is variable from one second to 98 seconds. If the value saved is "99" then paper retract will occur only if TEAR key is pressed or if data is received from host.

You can increase or decrease the retract timer by pressing the ↑ or the ↓ keys respectively. The default retract time is 10 seconds.

OPT: RETRACT TIME ENTER

OPT:RET TIME> 1-99 ↓

Confirm Park

Y: Upon receipt of the path select or park command from the host, and prior to park current path, the paper will move to the tear-off position. The LCD will display PLEASE TEAR OFF. You must press the TEAR or the PARK keys that enable the subsequent form park.

N: Paper Parking will occur without moving to tear-off position.

OPT: CONFIRM PARK ENTER

OPT:CNFRM PARK>N ↓

OPT:CNFRM PARK:Y ↓

Motion Sensor

Enables error indication of incorrect paper motion detected by sensor on tractor assemblies. It is a motion sensor with adjustable hole count (0 to 22 holes). 6 holes is the default value.

OPT:MOVE PAPER	ENTER
OPT:MOVE PAP.>6	↓

Non-volatile RAM Save

Y: The current *Operational Menu* values are retained when the printer is powered-off and re-established as the “active” values at the next power-up.

N: The current *Operational Menu* values are cleared when the printer is powered off.

Factory default values or Format assigned to current paper path values are used at the next power-up.

OPT: NVRAM SAVE	ENTER
OPT:NVRAM SV>Y	↓
OPT:NVRAM SV:N	↓

Clear Margin

Clears (Y) or preserves (N) top and bottom margins on form length changes.

OPT: CLEAR MARGIN	ENTER
OPT:CLR MRGN>Y	↓
OPT:CLR MRGN:N	↓

2 Box Option

This function will be displayed only if the additional Front2 tractor assembly has been installed, see [The Front2 Push Tractor Assembly](#) in this *User's Manual*.

Whenever the current continuous forms push paper path becomes empty, the printer will (Y) or will not (N) automatically switch to and load the other continuous forms push paper path and resume printing, based upon your selection.

OPT: 2 BOX OPTION	ENTER
OPT:2 BOX OP>N	↓
OPT:2 BOX OP:Y	↓

Cancel Code

If the printer receives the CAN (cancel) code from the host, then the printer will (Y) or will not (N) respond to the CAN code based upon your selection.

OPT: CAN CODE	ENTER
OPT:CAN CODE>Y	↓
OPT:CAN CODE:N	↓

Backup Option

BC/OS/BOTH: The printer will return the print head to the vertical position established before turning on Barcode/Oversize/Both modes at the completion of printing of the current barcode symbol.

NONE: The print head will remain in the vertical and horizontal position active at the completion of printing of the selected symbol.

OPT: BACKUP	ENTER
OPT:BACKUP>NONE	↓
OPT:BACKUP:BC	↓
OPT:BACKUP:OS	↓
OPT:BACKUP:BOTH	↓

Barcode Guard Bar Enable

The printer will (Y) or will not (N) include left, right and center Guard bars of the barcode styles which use Guard bars based upon your selection. The Guard bars extend into the human readable line of the barcode symbol when it is enabled.

OPT: GUARD BAR	ENTER
OPT:GUARD BR>N	↓
OPT:GUARD BR:Y	↓

Slash Zero Enable

The printer will print a zero character with (Y) or without (N) a diagonal slash through the character based upon your selection.

OPT: SLASH ZERO	ENTER
OPT:SLASH 0>N	↓
OPT:SLASH 0:Y	↓

Bell Control

The printer will (Y) or will not (N) sound the bell whenever a key is pressed, paper out occurs or other printer errors occur based upon your selection.

OPT: BELL ENABLE	ENTER
OPT:BELL ENBL>Y	↓
OPT:BELL ENBL:N	↓

Native Extension Escape Sequence

Based upon your selection, the printer will (Y) or will not (N) respond to the following escape sequences: <ESC> [[3 n, <ESC> [[G n m, <ESC> [[x n, <ESC> [[y n, and //n//.

OPT: NATIVE COMND	ENTER
OPT:NATIVE COM>Y	↓
OPT:NATIVE COM:N	↓

On line Default

OFLN: The printer will remain offline at completion of power-up routine.

ONLN: The printer will go online at completion of power-up routine.

PRI0: The printer will resume active state prior to power-off.

OPT: ONLIN DFAULT	ENTER
OPT:ONLIN>OFLN	↓
OPT:ONLIN:ONLN	↓
OPT:ONLIN:PRI0	↓

On Line after Paper Load Sequence

The printer will enter the online (Y) or offline (N) condition following a paper load sequence based upon your selection.

OPT: ONLIN AT LOD	ENTER
OPT:ONLIN LOAD>N	↓
OPT:ONLIN LOAD:Y	↓

Ribbon Type Selection

Informs the firmware which type of ribbon is installed (not affected by ISU).

If PROCESS (process ribbon) or RED/BLK (red/black ribbon) are selected, then the printer will respond to receive color select commands.

If BLACK (black ribbon) is selected, then an automatic ribbon shift will occur.

OPT: RIBBON TYPE	ENTER
OPT:RBN>BLACK	↓
OPT:RBN:PROCESS	↓
OPT:RBN:RED/BLK	↓

Printhead Gap to Path or Format Assignment

Based upon your selection the printer will save a print head gap value either to the current paper path or to the format during the print head gap setting routine in the *Operational Menu*. (see [Adjusting for the Thickness of Your Forms](#) section).

If you select PATH, then the printer will establish a new gap whenever you load a new paper path.

If you select FORM, then the printer will establish a new gap whenever you select a new format or whenever you load a paper path to which a format has been assigned.

OPT: GAP ASSIGN	ENTER
OPT:GAP TO>PATH	↓
OPT:GAP TO:FORM	↓

Euro Currency Symbol Substitution in the ISO Code Pages and PC Code Page 850

This function allows selection of the alternate access to the Euro Currency symbol (€) in the ISO Code Pages and in the PC Code Page 850.

Y: This setting enables the Euro symbol substitution. The Euro symbol will appear as designated in the appropriate sets: the location is A4 in all ISO 8859 character sets other than ISO 8859-15 and ISO 8859-5 (Cyrillic), for the PC Code Page 850, the location is CF.

N: This setting disables the Euro symbol substitution.

OPT:EURO SUBST.	ENTER
OPT:EURO SUB.>N	↓
OPT:EURO SUB.:Y	↓

Euro Currency Symbol Substitution in the PC Code Pages

This function allows selection of the alternate access to the Euro Currency symbol (€) in the PC Code Pages.

Y: This setting enables the Euro symbol substitution. The Euro symbol will appear as designated in the appropriate sets: the location is FE in all PC Code Pages other than CP 858.

N: This setting disables the Euro symbol substitution.

OPT:EURO WIN	ENTER
OPT:EURO WIN>N	↓
OPT:EURO WIN:Y	↓

The character set tables that contain the Euro currency symbol (CP858 and ISO 8859/15) are shown in the <i>Tables</i> section in the <i>Programmer's Manual</i> on the CD-Rom.
--

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (BUFFER SETUP displays).

Selecting the Input Buffer Configuration

Select input buffer options as shown below.

BUFFER SETUP

To change the input buffer options, press the ENTER key to go from the top level to the second level as shown below. There are 4 options that can be specified:

Download Buffer

Based upon the selection, the printer will (Y) or will not (N) reserve space in memory for characters downloaded from the host in the Epson and IBM emulations.

If Y is selected, the download characters are accepted and 16 Kbytes decrease the amount of input buffer.

If N is selected, the download characters will be printed as normal data and the input buffer will be according to the Input Buffer size selection (see BUFF SIZE function below).

BUFFER SETUP	ENTER
BUFF: DOWNLOAD	ENTER
BUFF: DOWNLD>N	↓
BUFF: DOWNLD:Y	↓

Input Buffer

Data received from the host is stored in the input buffer memory. Based upon your selection, the amount of space reserved for the input buffer is determined.

The maximum input buffer size is 32 Kbytes.

The increment is 1 byte for the range 256-1Kbyte and 1Kbyte for the range 1Kbyte-32 Kbytes.

```
BUFF: BUFF SIZE      ENTER
BUFF: SIZE>32K       ↓
```

High Trip

The default buffer full trip point will be 95% of currently selected size.

The range is from 2 % to 99% (default 95%).

```
BUFF: HIGH TRIP      ENTER
BUFF: HITRIP>95%     ↓
```

Low Trip

The default buffer empty trip point will be 90% of currently selected size.

The range is from 1% to 98% (default 90%).

```
BUFF: LOW TRIP       ENTER
BUFF: LOTRIP>90%     ↓
```

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (INTERFACE displays).

Selecting the Interfaces

Select the parallel and the serial interface as shown below.

INTERFACE

Press the ENTER key to go from the top level to the second level.

Selecting the Interface Types

This function allows selection of the interface types:

PARALLEL: Activates parallel interface.

SERIAL: Activates both RS232 and RS422 signals.

LAN: Activates LAN interface when the optional Ethernet 10/100 Base T board is installed.

BOTH: The printer will respond to data on parallel/serial or parallel/LAN interfaces.

See *Interface* section for interface pin and signal definitions in the *Programmer's Manual* on the CD-Rom.

INTERFACE	ENTER
I/F: TYPE	ENTER
I/F:TYPE>BOTH	↓
I/F:TYPE:PARALL	↓
I/F:TYPE:SERIAL	↓ (displayed if the serial interface board is installed)
I/F:TYPE:LAN	↓ (displayed if the optional LAN interface board is installed)

Selecting the Interface Switching Time

This function allows selection of the automatic interface switching time. The range is from 5 to 99 seconds.

I/F: SWITCH TIME	ENTER
I/F:SWIT TIME>10	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PARALLEL OPTIONS displays).

Selecting Parallel Interface Options

Select the parallel interface options as shown below.

PARALLEL OPTIONS

To change the parallel interface options, press the ENTER key to go from the top level to the second level as shown below. There are 10 options that can be specified:

Auto Feed External (AFXT) Signal

The printer will or will not respond to the AFXT signal on the parallel interface.

If AFXT is enabled response (Y), then upon receipt of a CR from the host, the printer will also execute a line feed provided the AFXT signal is low.

If AFXT is not enabled response (N), then the printer will only execute a carriage return upon receipt of a CR code.

PARALLEL OPTIONS	ENTER
PAR: AFXT	ENTER
PAR:AFXT>N	↓
PAR:AFXT:Y	↓

Select-in Signal

The printer will or will not respond to the Select-in signal of the parallel interface.

If response to the Select-in signal (Y) is enabled and the Select-in signal is high at power on, then the printer will receive data normally. Conversely, if the signal is low at power on, then the printer will ignore received data.

If response to the Select-in signal (N) is not enabled, then the printer will receive data normally regardless of the condition of the signal.

PAR: SLCT-IN	ENTER
PAR:SLCT-IN>N	↓
PAR:SLCT-IN:Y	↓

DC1/DC3 Control

Y: The printer will respond to a received DC1/DC3, which causes the printer to be selected/deselected. If the printer is deselected, the LCD will show STAND BY until DC1 is received or until you put the printer ON LINE by depressing the ON LINE key once.

N: Received DC1/DC3 ignored.

PAR: RCV DC1/DC3 ENTER

PAR:DC1/DC3>Y ↓

PAR:DC1/DC3:N ↓

Init Signal

Y: Enables parallel interface INIT signal to reset printer.

N: Disables parallel interface INIT signal.

PAR: INIT ENABLE ENTER

PAR:INIT ENBL>N ↓

PAR:INIT ENBL:Y ↓

Fault Lead

NONE: Printer does not indicate activity on Fault lead.

ONLN: Printer indicates ON LINE status on Fault lead.

FAUL: Printer indicates fault status on Fault lead.

PAR: FAULT LEAD ENTER

PAR:FAULT>NONE ↓

PAR:FAULT:ONLN ↓

PAR:FAULT:FAUL ↓

ACK Timing

BEF and AFT: ACK leading edge occurs before trailing edge of BUSY. ACK trailing edge occurs after trailing edge of BUSY.

AFT: ACK leading and trailing edges occur after trailing edge of BUSY.

DUR: ACK leading edge occurs before and trailing edge occurs at trailing edge of BUSY.

PAR: ACK TIMING	ENTER
PAR:ACK TIME>BEF	↓
PAR:ACK TIME:AFT	↓
PAR:ACK TIME:DUR	↓

STROBE Polarity

-: Printer latches data on falling edge of strobe signal.

+: Printer latches data on rising edge of strobe signal.

PAR: STRB POLARIT	ENTER
PAR:STROBE POL>-	↓
PAR:STROBE POL:+	↓

FAULT Polarity

-: When a printer fault exists, the FAULT signal is low.

+: When a printer fault exists, the FAULT signal is high.

PAR: FLT POLARITY	ENTER
PAR:FAULT POL>-	↓
PAR:FAULT POL:+	↓

SELECT Polarity

+: When the printer is selected, the SELECT signal is high.

-: When the printer is selected, the SELECT signal is low.

PAR: SLCT POLARIT ENTER

PAR:SELECT POL>+ ↓

PAR:SELECT POL:- ↓

PE Polarity

+: When a paper out condition exists, then the PE signal is high.

-: When a paper out condition exists, then the PE signal is low.

PAR: PE POLARITY ENTER

PAR:PE POL>+ ↓

PAR:PE POL:- ↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (SERIAL OPTIONS or LAN OPTIONS displays).

Selecting Serial Interface Options

Select the serial interface options as shown below.

SERIAL OPTIONS

This function will be displayed only if the Serial I/F board is installed in the printer.

To change the serial interface options, press the ENTER key to go from the top level to the second level as shown below. There are 12 options that can be specified:

Baud Rate

The data transmission rate (in bits per second) of the serial interface between the printer and the host computer is determined by this parameter.

After making your selection from the list below, please make certain the host computer is set for the same baud rate.

SERIAL OPTIONS	ENTER
SER: BAUD RATE	ENTER
SER:BAUD>9600	↓
SER:BAUD:4800	↓
SER:BAUD:2400	↓
SER:BAUD:1200	↓
SER:BAUD:600	↓
SER:BAUD:300	↓
SER:BAUD:38400	↓
SER:BAUD:19200	↓

Number of Data Bits

The number of data bits per character used in data transmission on the serial interface between the printer and the host computer is determined by this parameter.

After making your selection from the list below, please make certain the host computer is set for the same baud rate.

SER: DATA BITS	ENTER
SER:DATA BITS>8	↓
SER:DATA BITS:7	↓

Parity Enable and Type

The type of parity used in data transmission on the serial interface between the printer and the host computer is determined by this parameter.

After making your selection from the list below, please make certain the host computer is set for the same baud rate.

SER: PARITY TYPE	ENTER
SER:PARITY>NONE	↓
SER:PARITY:ODD	↓
SER:PARITY:EVEN	↓
SER:PARITY:MARK	↓
SER:PARITY:SPACE	↓

ETX/ACK Protocol

When set to Y, the EXT/ACK protocol is enabled. This protocol is used to verify the receipt of blocks of data sent from the host to the computer.

```
SER: ETX/ACK      ENTER
SER:EXT/ACK>N      ↓
SER:EXT/ACK:Y      ↓
```

Robust Xon

Y: When enabled, the printer will output DC1 when buffer is empty and printer is on line.
N: Disables this function.

```
SER: ROBUST XON    ENTER
SER:ROBST XON>Y    ↓
SER:ROBST XON:N    ↓
```

XON/XOFF Status

BUFF: Reflects buffer status only.
FAULT: Reflects fault status only.
ON/BU: Reflects online and buffer status.
FA/BU: Reflects fault and buffer status.
NONE: Never output or never change from static state.
ONLN: Reflects online status only.

```
SER: XON/XOF STAT  ENTER
SER:XONXOF>BUFF    ↓
SER:XONXOF:FAULT    ↓
SER:XONXOF:ON/BU    ↓
SER:XONXOF:FA/BU    ↓
SER:XONXOF:NONE     ↓
SER:XONXOF:ONLN     ↓
```

DTR (Data Terminal Ready) Signal Status

FA/BU: Reflects fault and buffer status.

NONE: Never change from static state.

ONLN: Reflects online status only.

BUFF: Reflects buffer status only.

FAULT: Reflects fault status only.

ON/BU: Reflects online and buffer status.

SER: DTR STATUS	ENTER
SER:DTR>FA/BU	↓
SER:DTR:NONE	↓
SER:DTR:ONLN	↓
SER:DTR:BUFF	↓
SER:DTR:FAULT	↓
SER:DTR:ON/BU	↓

RTS (Request to Send Signal) Signal Status

FA/BU: Reflects fault and buffer status.

NONE: Never change from static state.

ONLN: Reflects online status only.

BUFF: Reflects buffer status only.

FAULT: Reflects fault status only.

ON/BUF: Reflects online and buffer status.

SER: RTS STATUS	ENTER
SER:RTS>FA/BU	↓
SER:RTS:NONE	↓
SER:RTS:ONLN	↓
SER:RTS:BUFF	↓
SER:RTS:FAULT	↓
SER:RTS:ON/BU	↓

SRTS (Second Request to Send Signal) Status

FA/BU: Reflects fault and buffer status.

NONE: Never change from static state.

ONLN: Reflects online status only.

BUFF: Reflects buffer status only.

FAULT: Reflects fault status only.

ON/BU: Reflects online and buffer status.

SER: SRTS STATUS ENTER

SER:SRTS>FA/BU ↓

SER:SRTS:NONE ↓

SER:SRTS:ONLN ↓

SER:SRTS:BUFF ↓

SER:SRTS:FAULT ↓

SER:SRTS:ON/BU ↓

DTR (Data Terminal Ready) Polarity

HI: (HIGH) actives > + 3V.

LO: (LOW) actives < - 3V.

SER: DTR POLARITY ENTER

SER:DTR POL>HI ↓

SER:DTR POL:LO ↓

RTS (Request to Send Signal) Polarity

HI: (HIGH) actives $> +3V$.

LO: (LOW) actives $< -3V$.

SER: RTS POLARITY ENTER

SER:RTS POL>HI ↓

SER:RTS POL:LO ↓

SRTS (Second Request to Send Signal) Polarity

HI: (HIGH) actives $> +3V$.

LO: (LOW) actives $< -3V$.

SER: SRTS POLARIT ENTER

SER:SRTS POL>HI ↓

SER:SRTS POL:LO ↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (KEY LOCKOUT displays).

Selecting LAN Interface Options

Select the LAN interface options as shown below.

LAN OPTIONS

This function will be displayed only if the Ethernet 10/100 Mbit interface board option is installed in the printer.

To change the LAN interface options, press the ENTER key to go from the top level to the second level as shown below.

IP Assignment

FIX: Assigns the static or fixed IP address.

DHCP: Assigns the dynamic IP address (DHCP protocol).

ARP: Assigns the user's defined IP address (ARP protocol).

LAN OPTIONS

ENTER

LAN: IP ASSIGN

ENTER

LAN:IP ASS.>FIX

↓

LAN:IP ASS.:DHCP

↓

LAN:IP ASS.:ARP

↓

Enable/Disable the Novell Service

N: Disables the service to see the printer via NOVELL network.

Y: Enables the service to see the printer via NOVELL network.

LAN: NOV. ENAB. ENTER

LAN:NOV. ENAB.>N ↓

LAN:NOV. ENAB.:Y ↓

Enable/Disable the SMTP Service

N: Disables the SMTP (Simple Mail Transfer Protocol) service, that is disables the reception/transfer/error service of the e-mail.

Y: Enables the SMTP (Simple Mail Transfer Protocol) service, that is enables the reception/transfer/error service of the e-mail.

LAN: SMTP ENAB. ENTER

LAN:SMTP ENAB.>N ↓

LAN:SMTP ENAB.:Y ↓

IP Address

This function sets the IP address. The IP address is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ↓ or ↑ keys to increase or decrease the values in one field. Press the ENTER key to save the selected values (SAVING CHANGE displays) and to move to the next field.

The range is from 000.000.000.000 to 255.255.255.255 (default 127.000.000.000).

LAN: IP ADDRESS	ENTER
>127.000.000.000	↓ or ↑

Net Mask

This function sets the net mask number. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ↓ or ↑ keys to increase or decrease the values in one field. Press the ENTER key to save the selected values (SAVING CHANGE displays) and to move to the next field.

The range is from 000.000.000.000 to 255.255.255.255 (default 255.255.254.000).

LAN: NET MASK	ENTER
>255.255.254.000	↓ or ↑

Gateway

This function sets the default gateway number. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ↓ or ↑ keys to increase or decrease the values in one field. Press the ENTER key to save the selected values (SAVING CHANGE displays) and to move to the next field.

The range is from 000.000.000.000 to 255.255.255.255 (default 000.000.000.000).

LAN: GATEWAY	ENTER
>000.000.000.000	↓ or ↑

Mail Server Address

This function is displayed only if the SMTP ENAB. function is selected in Y.

This function sets the mail server address. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ↓ or ↑ keys to increase or decrease the values in one field. Press the ENTER key to save the selected values (SAVING CHANGE displays) and to move to the next field.

The range is from 000.000.000.000 to 255.255.255.255.

LAN: MAIL SERV.	ENTER
>000.000.000.000	↓ or ↑

Hostname

The host is identified by a name. This function allows to create the name of the init host using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default hostname is DEFAULT.

LAN: HOSTNAME	ENTER
>DEFAULT	↓ or ↑

Workgroup Name

The workgroup is identified by a name. This function allows to create the name of the workgroup using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default name is P_NFFPS_TO.

LAN: WORKGROUP	ENTER
>P_NFFPS_TO	↓ or ↑

Security User Name

This function allows to create the security user name to log into the WEB server using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default name is root .

LAN: USERNAME	ENTER
>root	↓ or ↑

Security Password

This function allows to create the security password to log into the WEB server using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

LAN: PASSWORD	ENTER
>*****	↓ or ↑

E-mail Address

This function is displayed only if the SMTP ENAB. function is selected in Y.

This function allows to write the e-mail address where you can notify the failures using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

LAN: EMAIL ADDR

>

ENTER

↓ or ↑

Sender Address

This function is displayed only if the SMTP ENAB. function is selected in Y.

This function identifies the address of the sender's e-mail using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

LAN: SENDER ADDR

>

ENTER

↓ or ↑

Print Server Name in Novell Network

This function is displayed only if the NOV . ENAB . function is selected in Y.

This function allows to create the print server name in the Novell network using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default print server name is NKW_GENICOM.

LAN: N.SER.NAME	ENTER
>NW_GENICOM	↓ or ↑

Printer Name in Novell Network

This function is displayed only if the NOV . ENAB . function is selected in Y.

This function allows to create the printer name in the Novell network using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default printer name is PS1 .

LAN: N.PRI.NAME	ENTER
>PS1	↓ or ↑

Queue Name in Novell Network

This function is displayed only if the NOV . ENAB . function is selected in Y.

This function allows to create the print queue name in the Novell network using a string of characters. Use the ↓ or ↑ keys to scroll the characters. Press the ENTER key to save the selected value (SAVING CHANGE displays) and to move to the next character of the string.

The default queue name is Q1 .

LAN: N.QUE.NAME	ENTER
>Q1	↓ or ↑

Frame Type Mode in Novell Network

This function is displayed only if the NOV . ENAB . function is selected in Y.

This function selects the standard mode of the frame type in the Novell network.

AUTO : the frame type is set in automatic mode.

ETH2 : the frame type is set in Ethernet2 mode.

8022 : the frame type is set in 8022 mode.

8023 : the frame type is set in 8023 mode.

LAN: N.FRA.TYPE	ENTER
LAN:N.FRA>AUTO	↓
LAN:N.FRA:ETH2	↓
LAN:N.FRA:8022	↓
LAN:N.FRA:8023	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (KEY LOCKOUT displays).

Selecting Key Lockout

Select any key to be locked-out as shown below.

KEY LOCKOUT

Key lockout controls which operator panel keys (see [Key Functions](#) in this *User's Manual*) are active in order to prevent inadvertent operator key depression from interrupting normal printer function. To select keys for lockout, press the ENTER key to go from the top level to the second level.

ON (Online): Prevents key response only while printer is online.

ALW (Always): Prevents key response while printer is online or offline or during power-on.

NEV (Never): Printer always acknowledges key response.

If a locked key is pressed, then the printer will give an alarm BEEP (approx. 25 sec.) and the LCD will temporarily display KEY LOCKED (approx. 5 sec).

ON LINE key

If the ON LINE key is locked-out in ONL pressing the ON LINE key does not take the printer offline. However you can always put the printer back On line in the event that the printer was deselected (by host) or a Fault is detected such as Paper out.

If this key is locked-out in ALW, then this key will not permit to put the printer on line or off line.

KEY LOCKOUT	ENTER
KEYLOCK: ON LINE	ENTER
KEY:ONLINE>NEV	↓
KEY:ONLINE:ONL	↓
KEY:ONLINE:ALW	↓

FF/LOAD key

KEYLOCK:	FF/LOAD	ENTER
KEY:FF/LOAD>NEV		↓
KEY:FF/LOAD:ONL		↓
KEY:FF/LOAD:ALW		↓

LF key

KEYLOCK:	LINEFEED	ENTER
KEY:LINEFEED>ONL		↓
KEY:LINEFEED:ALW		↓
KEY:LINEFEED:NEV		↓

MENU key

The MENU key cannot be locked out during power on.

KEYLOCK:	MENU	ENTER
KEY:MENU>NEV		↓
KEY:MENU:ONL		↓
KEY:MENU:ALW		↓

PAPER UP key

KEYLOCK:	PAPER UP	ENTER
KEY:PAPER UP>ONL		↓
KEY:PAPER UP:ALW		↓
KEY:PAPER UP:NEV		↓

PAPER DOWN key

KEYLOCK:	PAPER DN	ENTER
KEY:PAPER DN>ONL		↓
KEY:PAPER DN:ALW		↓
KEY:PAPER DN:NEV		↓

TEAR OFF key

KEYLOCK:	TEAROFF	ENTER
KEY:TEAROFF>NEV		↓
KEY:TEAROFF:ONL		↓
KEY:TEAROFF:ALW		↓

PARK/PATH key

KEYLOCK:	PRK/PATH	ENTER
KEY:PRK/PATH>NEV		↓
KEY:PRK/PATH:ONL		↓
KEY:PRK/PATH:ALW		↓

FORMAT key

KEYLOCK:	FORMAT	ENTER
KEY:FORMAT>ONL		↓
KEY:FORMAT:ALW		↓
KEY:FORMAT:NEV		↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PATH/FORMAT displays).

Assigning a Format to a Paper Path

Any of the four formats may be assigned to both paper paths as shown below.

PATH/FORMAT

This function assigns the Format indicated to the Paper Path. The same Format may be assigned to both Paper Paths. The Format changes:

a) if the paper path changes.

or

b) if another Format is selected from the menu or from the host.

To change format-to-path selections, press the ENTER key as shown above to move from the top level to the second level.

FRONT1 Path/Format

P/F: FRONT 1	ENTER
P/F:FRNT1>CURRNT	↓
P/F:FRNT1:FORM#1	↓
P/F:FRNT1:FORM#2	↓
P/F:FRNT1:FORM#3	↓
P/F:FRNT1:FORM#4	↓

FRONT2 Path/Format (displayed only if the optional Front2 tractor is installed)

P/F: FRONT 2	ENTER
P/F:FRNT2>CURRNT	↓
P/F:FRNT2:FORM#1	↓
P/F:FRNT2:FORM#2	↓
P/F:FRNT2:FORM#3	↓
P/F:FRNT2:FORM#4	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PROGRAM UNITS displays).

Selecting Fixed or Numeric Program Units

Select the Program units as shown below.

PROGRAM UNITS

To change the Program units, press the ENTER key to go from the top level to the second level as shown below:

Program Units

Choose the type of Program units for menu selection of the following parameters:

- *Top reference*: Form Length
- *Left print reference*: Top/Bottom/Left/Right margins.

FIXED: The menu items listed will be input in "columns at the current cpi" or in "lines at the current lpi" as applicable.

NUMERIC: The menu items will be input in "inches" via the "watch style" numeric entry technique using the ↓,→,↑,← keys.

PROGRAM UNITS	ENTER
PROG>FIXED	↓
PROG:NUMERIC	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PRINT STATUS displays).

Printing the Contents of the Menus

Changes to the *System Menu* can be listed using the print status features. The printer displays the message below when this item is on the top level:

PRINT STATUS

There are three different menu listings that you can obtain: SYSTEM, CONFIG and FORMATS.

Print Status

CONFIG: This selection prints the contents of the current configuration.

FORMATS: This selection prints the contents of the current configuration and the four formats.

SYSTEM: This selection prints the contents of the System configuration.

PRINT STATUS	ENTER
PRINT>CONFIG	↓
PRINT:FORMATS	↓
PRINT:SYSTEM	↓

Select the value and press the ENTER key. The printer will begin print the listing you have selected as shown on the following pages.

CURRENT CONFIGURATION PRINTOUT

CURRENT

```

FONT STYLE      COURIER
DRAFT MODE      NORMAL
CHARS PER INCH  10
TOP REF         0/90
LINES/INCH      6
FORM LENGTH     66
TOP MARGIN      0
BOT MARGIN      0
LEFT MARGIN     0
RGHT MARGIN     136
LEFT REF        0/120
BOLD            NO
UNDERLINE       NO
FWIDTH UL       YES
DOUBLE HI       NO
OVERSCORE       NO
PROPORT         NO
IMPACT MODE     HIG
QUIET MODE      NO
LABELS          NO
TEXT DIRECT     BI
GRAPH DIRCT     BI
EMULATION       EPSON FX
  
```

```

                                FORMAT      GAP
FRONT1      CURRENT          AUTO 0
FRONT2      CURRENT          AUTO 0
  
```

- CURRENT CONFIGURATION AND FORMAT PRINTOUT

	CURRENT	FORMAT 1	FORMAT 2	FORMAT 3	FORMAT 4
FONT STYLE	COURIER	COURIER	COURIER	COURIER	COURIER
DRAFT MODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
CHARS PER INCH	10	10	10	10	10
TOP REF	0/90	0/90	0/90	0/90	0/90
LINES/INCH	6	6	6	6	6
FORM LENGTH	66	66	66	66	66
TOP MARGIN	0	0	0	0	0
BOT MARGIN	0	0	0	0	0
LEFT MARGIN	0	0	0	0	0
RGHT MARGIN	136	136	136	136	136
LEFT REF	0/120	0/120	0/120	0/120	0/120
BOLD	NO	NO	NO	NO	NO
UNDERLINE	NO	NO	NO	NO	NO
FWIDTH UL	YES	YES	YES	YES	YES
DOUBLE HI	NO	NO	NO	NO	NO
OVERSCORE	NO	NO	NO	NO	NO
PROPORT	NO	NO	NO	NO	NO
IMPACT MODE	HIG	HIG	HIG	HIG	HIG
QUIET MODE	NO	NO	NO	NO	NO
LABELS	NO	NO	NO	NO	NO
TEXT DIRECT	BI	BI	BI	BI	BI
GRAPH DIRECT	BI	BI	BI	BI	BI
EMULATION	EPSON FX	EPSON FX	EPSON FX	EPSON FX	EPSON FX
	FORMAT	GAP			
FRONT1	CURRENT	AUTO 0			
FRONT2	CURRENT	AUTO 0			

- SYSTEM CONFIGURATION PRINTOUT

FIRMWARE CODE: Ver. 1.00 784100395 1100 CPS MODEL
 LAN CODE: Ver.01.26 78410018
 MAC ADDRESS: 00.06.6D.00.04.20

SYSTEM PARAMETERS

```

-----
CHARACTER SET      EPSON      ITALIC
                   IBM        CS1
                   ANSI       CS1

NATIONAL SET       EPSON      USA
                   ANSI       USA

CHARACTER TABLE   EPSON      CODE437
                   IBM        CODE437
                   ANSI       CODE437

LCD LANGUAGE       ENGLISH

IBM OPTIONS        COMP CHR   17
                   AUTO CR    NO

ANSI OPTIONS       RIS ENABLE  YES
                   SI/SO CTL   NO
                   AUTO CR     NO
                   PRIME ON DEL NO
                   CONTRL IN DG YES
                   EXPAND UP    YES
                   ALT GRAPHICS NO
                   8 BIT CTRL   NO
                   ENQ CODE     NO
                   S/SUB SCRIPT NO
                   ESC+CTRLCODE NO
                   VT NOT SET   YES
  
```

OTHER OPTIONS	AUTO LF	NO
	DOUBLE LF	NO
	AUTO WRAP	YES
	AUTO TEAR	NO
	RETRACT TIME	10
	CONFIRM PARK	NO
	MOVE PAPER	1
	NVRAM SAVE	YES
	CLEAR MARGIN	YES
	2 BOX OPTION	NO
	CAN CODE	YES
	BACKUP	NONE
	GUARD BAR	NO
	SLASH ZERO	NO
	BELL ENABLE	YES
	NATIVE COMND	YES
	ONLIN DFAULT	OFLN
	ONLIN AT LOD	NO
	RIBBON TYPE	BLACK
	GAP ASSIGN	PATH
	EURO SUBST.	NO
	EURO WIN	NO
BUFFER SETUP	DOWNLOAD	NO
	BUFF SIZE	32K
	HIGH TRIP	95%
	LOW TRIP	90%
INTERFACE	TYPE	BOTH
	SWITCH TIME	10
PARALLEL OPTIONS	AFXT	NO
	SLCT-IN	NO
	RCV DC1/DC3	YES
	INIT ENABLE	NO
	FAULT LEAD	NONE
	ACK TIMING	BEF
	STRB POLARIT	-
	FLT POLARITY	-

	SLCT POLARIT	+
	PE POLARITY	+
SERIAL OPTIONS	BAUD RATE	9600
<i>(displayed if the serial I/F</i>	DATA BITS	8
<i>board is installed in the</i>	PARITY TYPE	NONE
<i>printer)</i>	ETX/ACK	NO
	ROBUST XON	YES
	XON/XOF STAT	BUFF
	DTR STATUS	FA/BU
	RTS STATUS	FA/BU
	SRTS STATUS	FA/BU
	DTR POLARITY	HI
	RTS POLARITY	HI
	SRTS POLARIT	HI
LAN OPTIONS	IP ASSIGN	FIX
<i>(displayed if the Ethernet</i>	NOV. ENAB.	NO
<i>10/100 Mbit board is</i>	SMTP ENAB.	NO
<i>installed in the printer)</i>	IP ADDRESS	127.000.000.000
	NET MASK	255.255.254.000
	GATEWAY	000.000.000.000
	HOSTNAME	DEFAULT
	WORKGROUP	P_NFFPS_TO
	USERNAME	root
	PASSWORD	*****
KEY LOCKOUT	ONLINE	NEV
	FF/LOAD	NEV
	LINEFEED	ONL
	MENU	NEV
	PAPER UP	ONL
	PAPER DN	ONL
	TEAROFF	NEV
	PRK/PATH	NEV
	FORMAT	ONL

PATH/FORMAT

FRONT1

CURRENT

FRONT2

CURRENT

PROGRAM UNIT

FIXED

ALIGNMENT

O

RESIDENT FONT STYLES & CODE PAGES

FONT STYLE	COURIER
	GOTHIC
	OCRA-EXT
	OCRB-EXT

DRAFT

CODE PAGE	CODE437
	CODE850
	CODE851
	CODE852
	CODE853
	CODE855
	CODE858
	CODE860
	CODE863
	CODE864
	CODE865
	CODE866
	CODE867
	ISO-1
	ISO-2
	ISO-3
	ISO-4
	ISO-5
	ISO-6
	ISO-7
	ISO-8
	ISO-9
	ISO-15
	MAZOWIA
	TURKISH
	GREEK
	ROMAN-8
	KAMENICKY
	CWI
	IN2
	CODE864E
	CODE1250

The Operational Menu

There are 14 primary headings in the *Operational Menu* as shown below. Each primary heading has one or two levels below it:

1. FONT STYLE
2. DRAFT MODE
3. CPI
4. PAGE SETUP
5. LINE SETUP
6. PRINT MODES
7. SPECIAL MODES
8. FORM THICKNESS
9. EMULATION
10. SAVE TO FORMAT
11. PRINT STATUS
12. CLEAR BUFFER
13. TEST MODE
14. SELECT FORMAT

Entering Operational Menu

To enter the *Operational Menu*, proceed as follows:

1. Hold the MENU key down in the off line state. The LCD displays the following message:

OPERATIONAL MENU

2. Then, the first menu item:

FONT STYLE

Moving within the Operational Menu

1. Press the ENTER key to go into the next lower level of the menu.
2. Use ↑ or ↓ keys to scroll within a level as well as to change parameter value display at the selection level.
3. Press the ENTER key to save selections at the selection level, the LCD displays:

SAVING CHANGE

The selection level is apparent whenever the LCD is flashing on and off.

4. Use the PRIOR key to go to the next higher level as well as to NOT save a selection at the selection level.

Selecting the Font Style

Select the font styles as shown below.

The font styles stored in Font card will be displayed after the FONT:DRAFT function.

FONT STYLE

To change the font styles, press the ENTER key to go from the top level to the second level as shown below:

FONT STYLE	ENTER
FONT>COURIER	↓
FONT:GOTHIC	↓
FONT:OCRA-EXT	↓
FONT:OCRB-EXT	↓
FONT:DP TEXT	↓
FONT:DRAFT	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (DRAFT MODE displays).

Selecting the Draft Print Mode

Select the draft modes of the printing.

DRAFT MODE

To change the draft mode, press the ENTER key to go from the top level to the second level as shown below.

NORMAL: selects the Draft print mode at normal speed.

HS: selects the Draft print mode at high speed.

DRAFT MODE	ENTER
DRAFT MOD>NORMAL	↓
DRAFT MOD:HS	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (CHARS PER INCH displays).

Selecting the Character Pitch

Select the character spacing in characters per inch.

CHARS PER INCH

To change the character spacing, press the ENTER key to go from the top level to the second level as shown below.

CHARS PER INCH	ENTER	CPI:5	↓
CPI>10	↓	CPI:20	↓
CPI:8.5	↓	CPI:17.1	↓
CPI:8.3	↓ (ANSI mode only)	CPI:16.7	↓ (ANSI mode only)
CPI:7.5	↓	CPI:15	↓
CPI:6	↓	CPI:12	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PAGE SETUP displays).

Selecting the Page Setup

Select page setup as shown below.

PAGE SETUP

To change the page setup, press the ENTER key to go from the top level to the second level as shown below. There are five page setup selections:

Top Print Reference

When using pre-printed forms, it may be desirable to begin printing at a particular position on the first form and at the same position on successive forms. To do so, adjust the top print reference (also known as load offset).

The range is from -90/90 to +180/90 inch or from -1/+2 inches depending upon *System Menu* ([PROGRAM UNITS](#)).

This value affects only the currently selected paper path.

PAGE SETUP	ENTER
PAGE: TOP REF	ENTER
PAGE: TREF > 0 / 90	↓ or ↑

Line Spacing

Select the line spacing in lines per inch (lpi).

PAGE: LINES / INCH	ENTER
PAGE: LPI > 6	↓
PAGE: LPI : 4	↓
PAGE: LPI : 3	↓
PAGE: LPI : 2	↓
PAGE: LPI : 12	↓
PAGE: LPI : 8	↓

Form Length

Select the form length in 1 line increments at the currently selected lpi or in inches depending upon *System Menu* (**PROGRAM UNITS**).

The maximum form length is 24 inches.

PAGE: FORM LENGTH	ENTER
PAGE: LNGTH: 1-144	↓ or ↑ (66 lpi default)

Top Margin

Select the top margin in 1 line increments at the currently selected lpi or in inches depending upon *System Menu* (**PROGRAM UNITS**).

The maximum top margin value is FL-BM-1 (Form Length-Bottom Margin-1).

PAGE: TOP MARGIN	ENTER
PAGE: TM>0	↓ or ↑

Bottom Margin

Select the bottom margin length from bottom of form, in 1 line increments at the currently selected lpi or in inches depending upon *System Menu* (**PROGRAM UNITS**).

The maximum bottom margin value is FL-TM-1 (Form Length-Top Margin-1).

PAGE: BOT MARGIN	ENTER
PAGE: BM>0	↓ or ↑

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (LINE SETUP displays).

Selecting the Line Setup

Select line setup as shown below.

LINE SETUP

To change the line setup, press the ENTER key to go from the top level to the second level as shown below. There are three line setup selections:

Left Margin

Select the left margin (up to 13.4 inches) in CPI or in inches depending upon *System Menu* ([PROGRAM UNITS](#)). The maximum left margin value is RM-1.

LINE SETUP	ENTER
LINE: LEFT MARGIN	↓
LINE: LM>0	↓ or ↑

Right Margin

Select the right margin (no less than 2 inches) in CPI or in inches depending upon *System Menu* ([PROGRAM UNITS](#)). The minimum right margin value is LM+1.

LINE: RGHT MARGIN	ENTER
LINE: RM>136	↓ or ↑

Left Reference

Select the left print reference (up to 0.5 inch) in CPI (unit: 1/120 inch. Range 0-60) or in inches depending upon *System Menu* ([PROGRAM UNITS](#)). Max. = 0.5 inch

LINE: LEFT REF	ENTER
LINE: LREF>0/120	↓ or ↑

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PRINT MODES displays).

Selecting the Print Modes

Select the print modes as shown below.

PRINT MODES

To change the print mode parameters, press the ENTER key to go from the top level to the second level as shown below. There are six print mode selections:

Bold Mode

Y: Enables bold print mode.

N: Disables bold print mode.

PRINT MODES	ENTER
PRINT: BOLD	ENTER
PRINT:BOLD>N	↓
PRINT:BOLD:Y	↓

Underline Mode

Y: Enables underline print mode.

N: Disables underline print mode.

PRINT: UNDERLINE	ENTER
PRINT:UL>N	↓
PRINT:UL:Y	↓

Full Width Underline Mode

Y: Enables full width underline print mode.

N: Disables full width underline print mode.

PRINT: FWIDTH UL	ENTER
PRINT:FW UL>Y	↓
PRINT:FW UL:N	↓

Double High Mode

Y: Enables double high print mode.

N: Disables double high print mode.

PRINT: DOUBLE HI	ENTER
PRINT:DBLHI>N	↓
PRINT:DBLHI:Y	↓

Overscore Mode

Y: Enables overscore print mode.

N: Disables overscore print mode.

PRINT: OVERSCORE	ENTER
PRINT:O-SCORE>N	↓
PRINT:O-SCORE:Y	↓

Proportional Mode

Y: Enables proportional print mode. If enabled and the draft font is selected, then subsequent printing will be in proportional Courier Letter Quality. If another LQ font is selected, then subsequent printing will be in the same font style in proportional mode.

N: Disables proportional print mode.

PRINT: PROPORT	ENTER
PRINT:PROPORT>N	↓
PRINT:PROPORT:Y	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (SPECIAL MODES displays).

Selecting the Special Modes

Select the special modes as shown below.

SPECIAL MODES

To change the special mode parameters, press the ENTER key to go from the top level to the second level as shown below. There are five print mode selections:

Impact Mode

HIG: increases print wire drive pulse width. For heavier multi-part forms you may choose to select HIGH (print wire) impact mode.

LOW: decreases print wire drive pulse width. For lighter forms or for quieter printing, you may choose to select LOW impact.

SPECIAL MODES	ENTER
SPEC: IMPACT MODE	ENTER
SPEC: IMPACT>HIG	↓
SPEC: IMPACT:LOW	↓

Quiet Printing Mode

Y: Printing occurs in two passes of print head. For quieter printing (at reduced print speed) you may choose this mode (QUIET mode).

N: Printing occurs in one pass of print head.

SPEC: QUIET MODE	ENTER
SPEC: QUIET>N	↓
SPEC: QUIET:Y	↓

Labels

Y: Inhibits a backward motion, inhibits tear off and parks in forward direction. In order to prevent reverse feeding (and thus reduce chance of label peeling), you may select LABELS:Y.

N: Sets normal operation.

SPEC: LABELS	ENTER
SPEC: LABELS>N	↓
SPEC: LABELS:Y	↓

Text Direction

BI: All text print modes are printed in bid-directional mode.

UNI: All text print modes are printed uni-directional mode. In order to obtain even higher line-to-line character alignment, you may select uni-directional (UNI) text mode.

SPEC: TEXT DIRECT	ENTER
SPEC: TEXT>BI	↓
SPEC: TEXT:UNI	↓

Graphic Direction

BI: All graphics modes are printed in bi-directional mode.

UNI: All graphics modes are printed in uni-directional mode. In order to obtain even higher line-to-line column alignment, you may select uni-directional (UNI) graphics mode.

SPEC: GRAPH DIRCT	ENTER
SPEC: GRAPH>BI	↓
SPEC: GRAPH:UNI	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (FORM THICKNESS displays).

Adjusting for the Thickness of Your Forms

You can select three mutually independent methods of making the adjustment for the thickness (also known as the print head-to-paper gap) of the forms you plan to use.

FORM THICKNESS

To change the methods, press the ENTER key to go from the top level to the second level as shown below:

Manual Gap Adjust

This method allows you to override the automatic and fixed gap adjust routines. When enabled (Y) you must set the gap by means of the gap adjust wheel. This wheel is located to the left of the ribbon cartridge. The marks of the wheel (1...2...3) correspond to the number of parts in your form set.

FORM THICKNESS	ENTER
FORM: MANUAL	ENTER
FORM: MANUAL>N	↓
FORM: MANUAL:Y	↓

Automatic Gap Adjust

This, the easiest method, causes the printer to automatically make the adjustment based upon the form thickness selected. This is the recommended method. An "offset" to this automatic adjustment may be selected in order to fine-tune the gap to your forms. The range of the offset is from -8/+8. With or without an offset, the printer will automatically make the adjustment each time you load a new set of forms. Please note that for forms of varying thickness, this method may or may not make an appropriate adjustment depending upon which area of the form was used during the adjust procedure.

The automatic gap value will be stored as a "path" parameter or as a "format" parameter based upon the **GAP ASSIGN** selection in the *System Menu*.

If **GAP ASSIGN:PATH** is selected in the *System Menu*, then the offset value will be stored for the currently selected path and will be recalled the next time paper is loaded in the current path.

If **GAP ASSIGN:FORMAT** is selected in the *System Menu* then the offset value will be stored in the current format. The current format must be saved to a numbered (1-4) format. Then, the next time that particular format number is selected, the offset gap value will be recalled.

FORM: AUTO
FORM: AUTO>0

ENTER
↓ or ↑

Fixed Print Adjust

This method sets the gap and fine tunes it at the same time. This method is recommended for forms of varying thickness such as shipping notices and envelopes. The range of the fixed gap is from 0.3 to 8.6. A selection of 1.0 is the best for single part 20lbs. (75 g/m²). A selection of 6.0 is the best lightweight 6-part forms. Higher selections should be used for heavier or higher part count forms.

FORM: FIXED

ENTER

FORM: FIXED>0.6

↓ or ↑

This fixed gap value will be stored as a "path" parameter or as a "format" parameter based upon the **GAP ASSIGN** selection in the *System Menu*.

If GAP ASSIGN:PATH is selected in the *System Menu*, then the fixed gap value will be stored for the currently selected path and will be recalled the next time paper is loaded in the current path.

If GAP ASSIGN:FORMAT is selected in the *System Menu*, then the fixed gap value will be stored in the current format. You must then save the current format to a numbered (1-4) format. Then, the next time that particular format number is selected, the offset gap value will be recalled.

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (EMULATION displays).

Selecting the Emulation

Select the emulation as shown below.

EMULATION

To change the emulation, press the ENTER key to go from the top level to the second level as shown below.

EMULATION	ENTER
EMUL>EPSON FX	↓
EMUL:IBMXL3	↓
EMUL:3410ANSI	↓
EMUL:3840ANSI	↓
EMUL:3811ANSI	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (SAVE TO FORMAT displays).

Saving Current Format Settings to a Stored Format

Select the Save to Format function as shown below.

SAVE TO FORMAT

The selections for the current configuration are saved to a "format" that is a repository for the *Operational Menu* parameters that are customized for particular application.

Up to four formats can be defined and the format parameters stored in NVRAM:

- FORM#1
- FORM#2
- FORM#3
- FORM#4

SAVE TO FORMAT	ENTER
SAVE TO>NONE	↓
SAVE TO:FORM#1	↓
SAVE TO:FORM#2	↓
SAVE TO:FORM#3	↓
SAVE TO:FORM#4	↓

The savable parameters are:

Font Style, Character per inch, Lines per inch, Print Modes, Special Modes, Form Length, Left Margin, Right Margin, Top Margin, Bottom Margin, Top Print Reference, Left Reference, Form Thickness, Emulation.

The information stored in one of the four formats can be recalled later via **SELECT FORMAT** function in the *Operational Menu*.

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (PRINT STATUS displays).

Printing the Contents of the Menus

Changes to the *Operational Menu* can be listed using the print status feature below.

The printer displays the message below when this item is on the top level:

PRINT STATUS

There are three different menu listings that you can obtain: SYSTEM, CONFIG and FORMATS:

CONFIG: This selection prints the contents of the current configuration.

SYSTEM: This selection prints the contents of the System configuration.

FORMATS: This selection prints the contents of the current configuration and the four formats.

PRINT STATUS	ENTER
PRINT:CONFIG	↓
PRINT:FORMATS	↓
PRINT:SYSTEM	↓

Select the value and press the ENTER key. The printer will begin printing the listing you have selected (see [Printing the Contents of the Menus](#) before in this *User's Manual*)

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (CLEAR BUFFER displays).

Clearing Contents of the Input Buffer

Select the clear buffer function as shown below.

CLEAR BUFFER

Data received from the host and as yet unprinted will be erased (Y) or not (N) based upon your selection. Press the ENTER key to go from the top level to the second level as shown below.

CLEAR BUFFER	ENTER
CLEAR BUFFER>N	↓
CLEAR BUFFER:Y	↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (TEST MODE displays).

Selecting the Test Mode

Select the test modes as shown below.

TEST MODE

To select one of the three test mode selections, press the ENTER key to go from the top level to the second level as shown below:

Test Pattern Width Selection

Selects between an 8.0-inch width and a 13.6-inch width.

TEST MODE	ENTER
TEST: PAPER WIDTH	ENTER
TEST:WIDTH>8.0	↓
TEST:WIDTH:13.6	↓

Test Mode

Y: Enabling this mode causes the printer to print a rolling ASCII pattern (with the right margin value established by the **PAPER WIDTH** setting or user established value).

The LCD displays:

TEST MODE

and the Menu is exited.

The printer will be in the off line state while the test pattern is printing.

- Pressing the MENU key and going back into the menu can interrupt printing.
- Printing parameters can be changed at this time and printing will resume when the MENU key is pressed.
- Test pattern printing will cease and test mode is exited when ON LINE key is pressed.

N: The test pattern stops printing.

TEST: START TEST	ENTER
TEST:START>N	↓
TEST:START:Y	↓

Hexadecimal Dump Mode

Y: Enabling this mode causes the printer to print the hexadecimal value of each character received.

When finished using the Hex Dump feature, it is necessary to disable it by selecting N or by turning power off.

While in the Hex Dump mode, the printer will not respond to any control or escape codes since it will print out the value of those codes instead.

TEST: HEX DUMP ENTER

TEST:HEXDUMP>N ↓

TEST:HEXDUMP:Y ↓

Go back to the top level of the menu with the PRIOR key and press the ↓ key to select the next menu item (SELECT FORMAT displays).

Selecting a Stored Format

Recalls one of the formats stored by the **SAVE TO FORMAT** section of the *Operational Menu*. All current configuration parameters will be over-written with the values from the format selected.

You can also use the FORMAT key to achieve the same result.
--

SELECT FORMAT	ENTER
SELECT:FORM#1	↓
SELECT:FORM#2	↓
SELECT:FORM#3	↓
SELECT:FORM#4	↓

The selected format will remain in effect until one of the following occurs:

- Another format is selected from the Menu,
- A path is loaded that has a format assigned to it,
- The host sends a command that modifies one of the parameter values (e.g. changes font style),
- The host sends a command to select a new format (ANSI mode only).

Paper Handling

Paper Specifications

It is important to use the correct paper for obtaining the best performance. See the information table below:

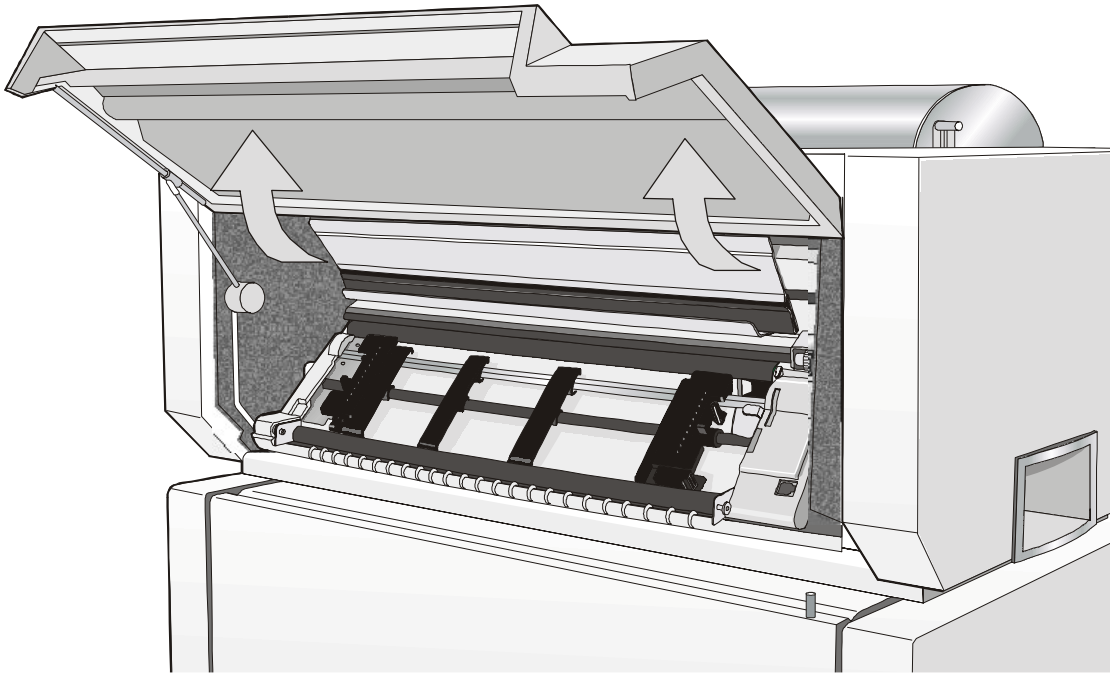
Fanfold Paper

Loading Mode	Front1 Tractor	Front2 Tractor (option)
Width	76 to 432 mm 3 to 17 inches	76 to 432 mm 3 to 17 inches
Length	76 to 609 mm 3 to 24 inches	76 to 609 mm 3 to 24 inches
Thickness	max. 0.635 mm 0.025 inches	max. 0.635 mm 0.025 inches
Copies	1 + 7	1 + 7
Weight (g/m ²):		
- Original	55 to 150	55 to 150
- Other Sheets	45 to 75	45 to 75
- Carbon Paper	35	35

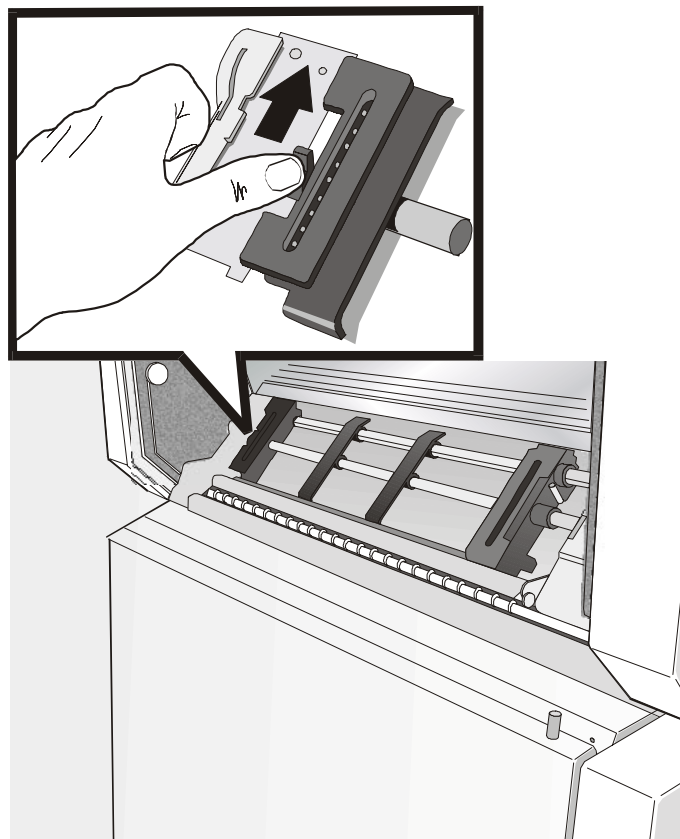
Paper Loading

Loading Paper Using the Front1 Push Tractor Assembly

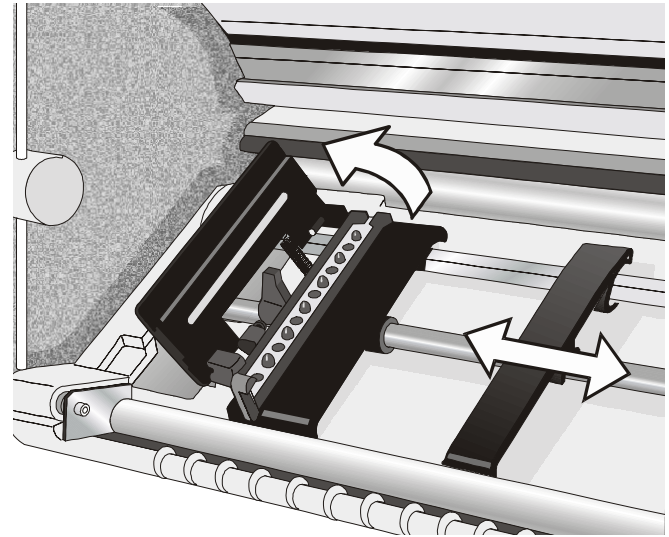
1. Open the tractor area cover lifting it upwards until it stops.



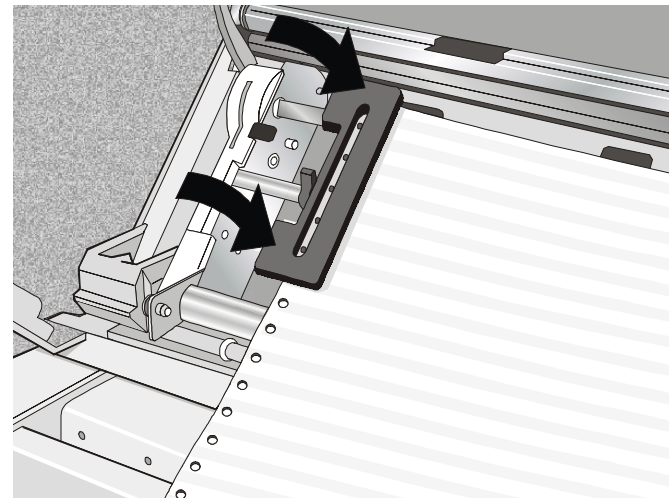
2. Unlock the tractor sets of the Front1 tractor assembly moving the levers up. Slide the left tractor set to the first printing column.



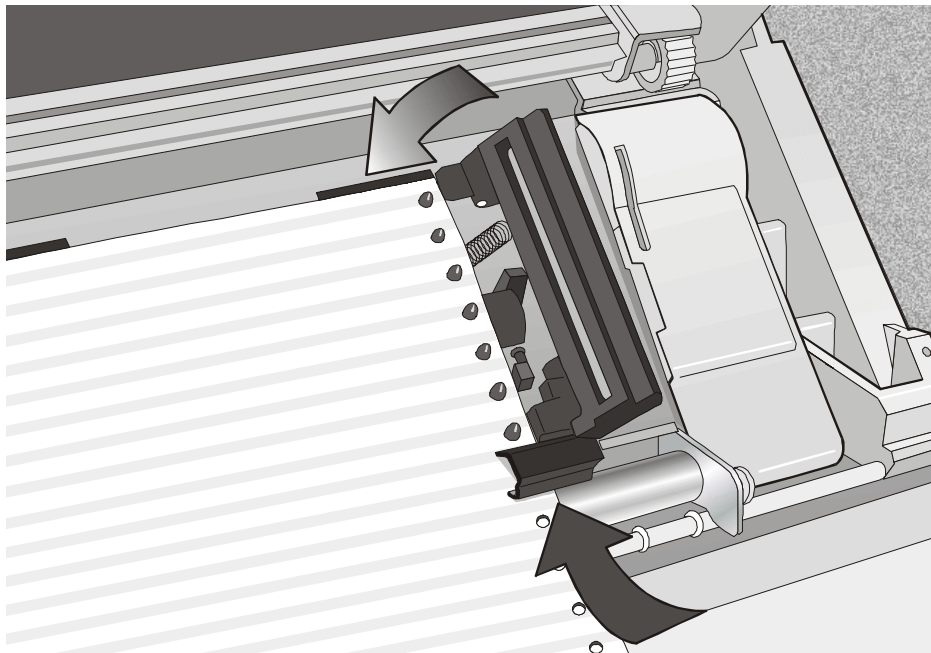
3. Space the paper guides along the tractor bar. Open the left and right tractor set covers.



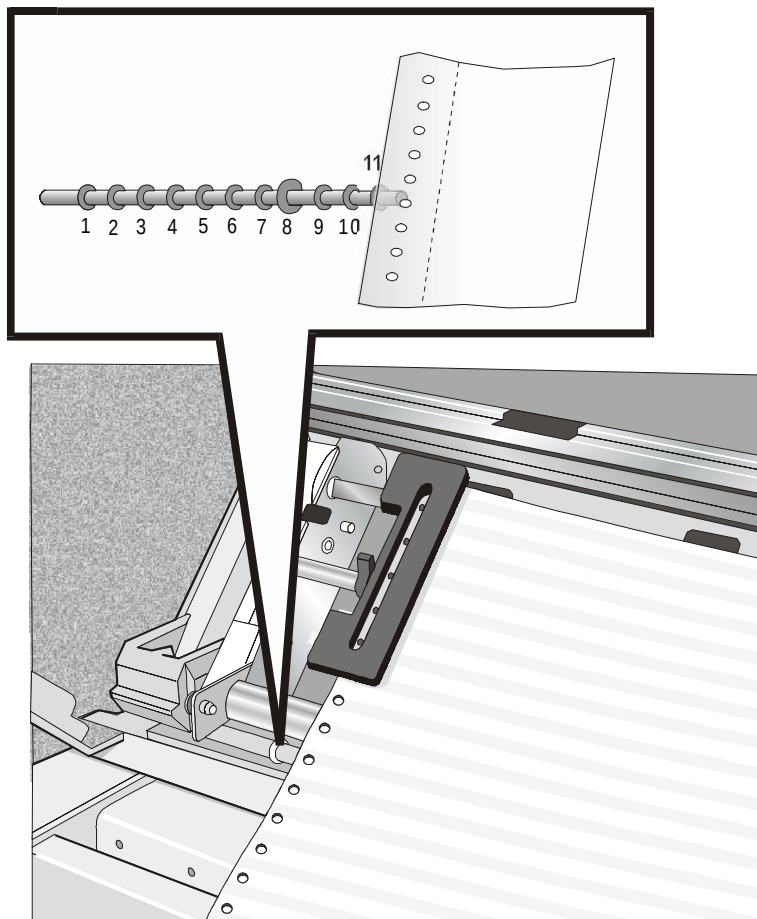
4. Hold the fanfold paper in front of the tractor sets and insert the paper perforation on the left tractor set pins and close the left tractor set cover.



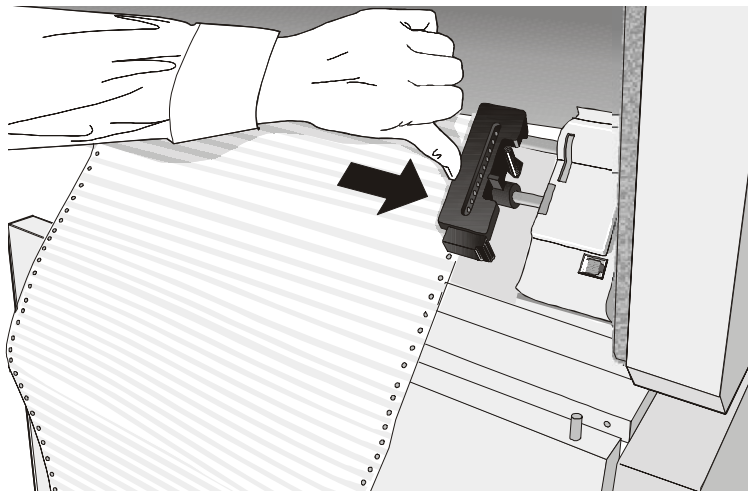
5. Insert the paper on the right tractor set pins, make sure the paper goes under the paper sensor and close the right tractor set cover.



6. Match the left tractor set for the first printing position, i.e. the left paper margin must match the eleventh notch on the printer cabinet.

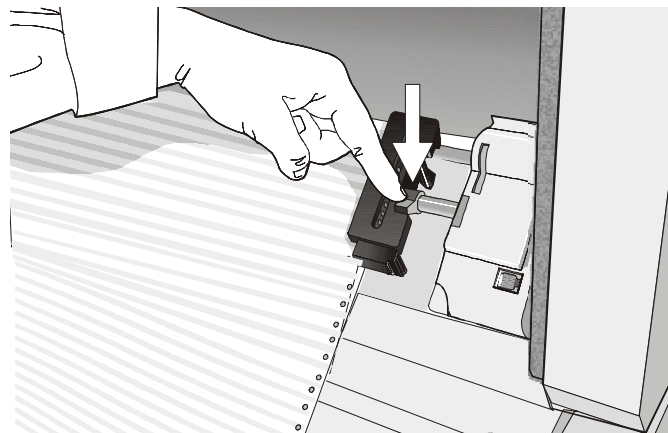


7. Adjust the right tractor set gently to remove slack from the paper.

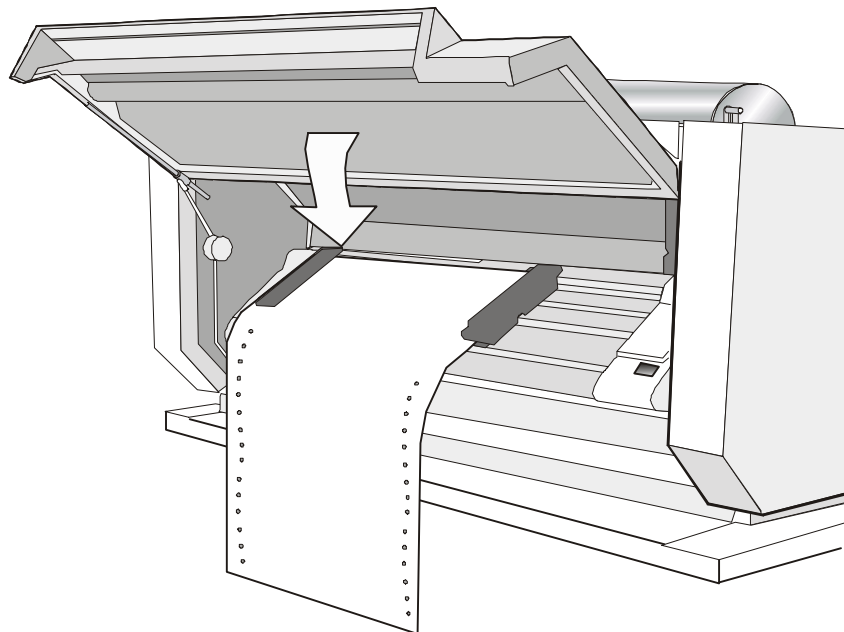


Make sure the paper is not taut.

8. Lock the left and right tractor sets moving it in place moving the lever down.



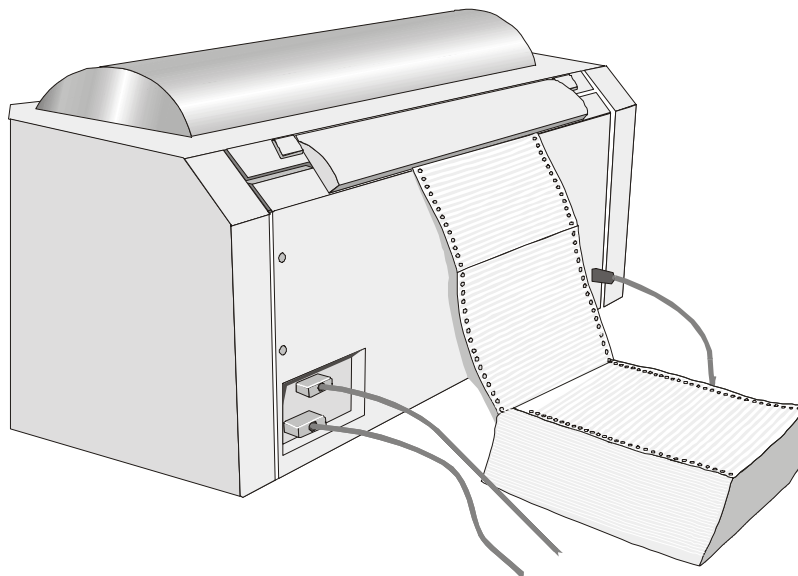
9. Close the tractor area cover.



10. Press LOAD/FF key to load the paper into the printer.
To select the Front1 Push paper path, press the PATH key until the Front1 led is turned on.
The paper will load automatically to the first print line position.
If paper does not load automatically, then press the LOAD/FF key and the LCD displays:

LOAD PAPR: FRONT1

The printed paper is ejected from the rear of the printer.



If paper starts to load but is not successful, and the error message **PAPER OUT:FRONT1** is displayed, then the paper sensor may require 'tuning' to the ambient lighting conditions in your office (the paper sensors used are light sensitive devices and improve paper loading accuracy).

Please refer to **Tuning the Paper Sensors** in the *Initial Set-Up Menu*.

Printer Maintenance and Troubleshooting

Cleaning the Printer

Make sure the printer has been turned off for at least 15 minutes before starting any cleaning operations.

Periodic cleaning will help keep the printer in top condition so that it will always provide optimal performance.

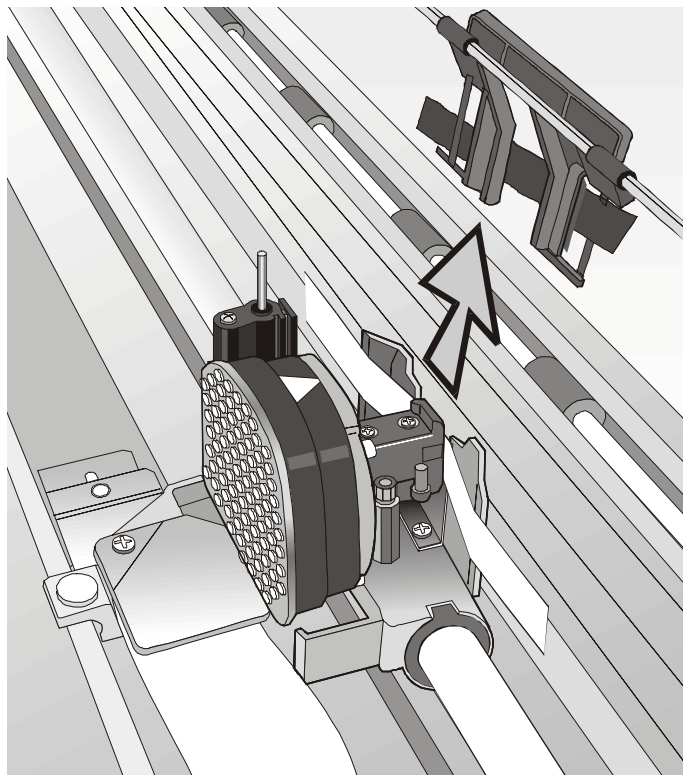
- Use a neutral detergent or water solution on a soft cloth to clean dirt and grease from the cabinet of the printer.
- Do not use an abrasive cloth, alcohol, paint thinner or similar agents because they may cause discoloration and scratching.
- Vacuum the inside of the printer in order to remove paper dust and other particles.
- Wipe the carriage rail with a soft dry cloth.

Replacing the Ribbon Cartridge

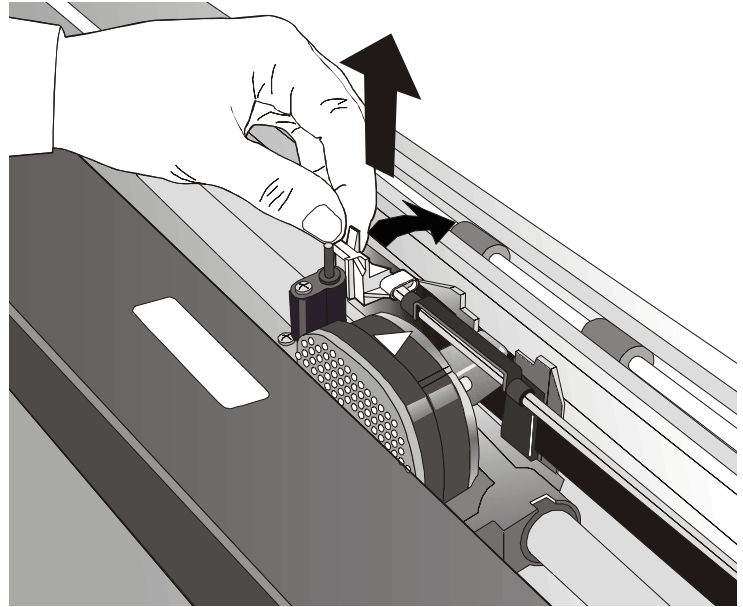
1. Make sure that the printer is turned off for at least 15 minutes.

Pay attention to the print head because it becomes hot during operation.

2. Open the top printer cover.
3. Slide the ribbon guide out of the print head.



4. Free the white plastic snap arm pushing the tab towards the back of the printer and simultaneously lifting it off the ribbon shifter.



5. Remove the used ribbon cartridge by lifting it up.

Now, you are ready to insert the new ribbon cartridge. See "[Ribbon Cartridge Installation](#)" for details.

Printing the Self Test

To determine any printer setting, and to check if the printer is working well, print the self-test. Proceed as follows:

1. Press the ON LINE key to disable the printer. The ON LINE led should go out and the LCD displays:

OFF LINE

2. Press the MENU key to enter the *Operational Menu*. The LCD displays:

OPERATIONAL MENU

3. After a time out of a few seconds, the first menu item is displayed:

FONT STYLE

4. Now, press the ↑ key until the LCD displays:

TEST MODE

5. Press the ENTER key. The display shows:

TEST:PAPER WIDTH

6. Press the ENTER key and then use the ↓ key to select the desired print width based upon the type of paper which you loaded. Push the ENTER key to save your selection. The LCD displays:

TEST:START TEST

7. Press the ENTER key, then the ↓ key. The display shows:

TEST:START:N

8. Press ↓ to change LCD display to read:

TEST:START:Y

9. Press the ENTER key and the test pattern will begin printing.

10. To stop the test printing and to exit test mode, press the ON LINE key.

Error Handling

When an error condition occurs:

- the printer enters WAIT state.
- the display will show the first message indicating the error. Then, another second message will be displayed giving more specific information about the error condition.

After you have alleviated the error condition, press always the ON LINE key to reset the error condition.

Error Message Description

Messages	Indication	Solution
A.G.A NOT OPER ADJUST THE GAP	The automatic gap adjustment (A.G.A) is not enabled.	Adjust the print head gap manually. Press the ON LINE key to reset the error condition.
BUFFER OVERFLOW CHARACTER LOST	A buffer overflow condition occurred (if serial interface is selected).	Turn the printer off to clear the buffer. Press the ON LINE key to reset the error condition.
DATA SET OFF	The printer detects a remote connection serial interface error. The DST or DCD signal was not sensed.	Press the ON LINE key to clear the error condition.
FRAMING ERROR WRONG CHARACTER	The stop bit is not detected on completion of the next reception.	Press the ON LINE key to clear the error condition.

Messages	Indication	Solution
JAM ON FRONT1 CHECK PAPER	A paper jam error condition occurs in Front1 paper path.	Check the Front1 Push tractor assembly and remove the jammed paper. Press the ON LINE key to clear the error condition. If paper jams are not present and the error message still appears, refer to Tuning the Paper Sensors in the <i>Initial Set-Up (ISU) Menu</i> .
JAM ON FRONT2 CHECK PAPER	A paper jam error condition occurs in Front2 paper path.	Check the optional Front2 Push tractor assembly and remove the jammed paper. Press the ON LINE key to clear the error condition. If paper jams are not present and the error message still appears, refer to Tuning the Paper Sensors in the <i>Initial Set-Up (ISU) Menu</i> .
OVERRUN ERROR CHARACTER LOST	An overflow condition has occurred in the buffer and the data has been lost.	Press the ON LINE key to clear the error condition.

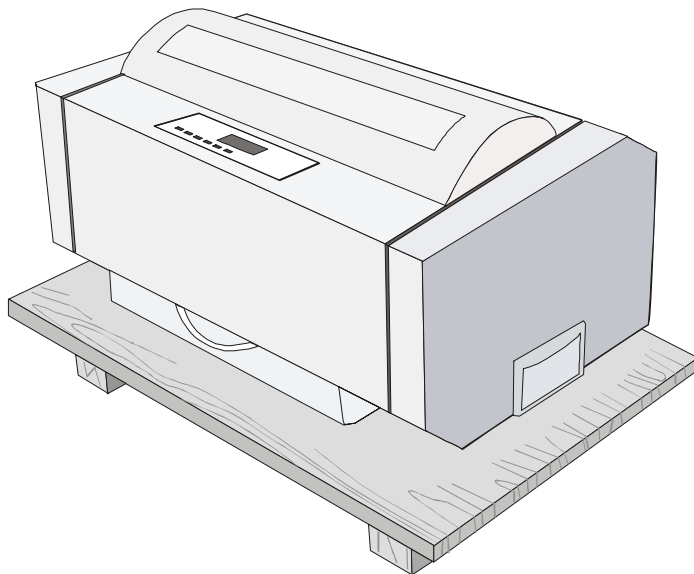
Messages	Indication	Solution
PAPER JAM CHECK ALL PATHS	A paper jam error condition occurs in Front1 and/or Front2 paper paths.	Check both paper paths and remove the jammed paper. Press the ON LINE key to clear the error condition. If this error is displayed during the parking procedure of fanfold paper, first press the ON LINE key to cancel the jam message and then the PARK key again, to complete the park procedure.
PARITY ERROR WRONG CHARACTER	The parity condition and receive data parity do not match.	Press the ON LINE key to clear the error condition.
PRINT INTEGRITY	Abnormal printout because of a possible print carriage blockage.	<i>Do not move the platen knob.</i> Press the ON LINE key to clear the error condition.
RIBBON BLOCKED CHECK RIBBON	The ribbon is blocked.	Check that the ribbon is correctly inserted. Turn the tension knob to make sure that the ribbon is not jammed. Check for proper installation of the ribbon guide on the print head. See " Ribbon Cartridge Installation " for details. Press the ON LINE key to clear the error condition.

Repacking the Printer for Shipment

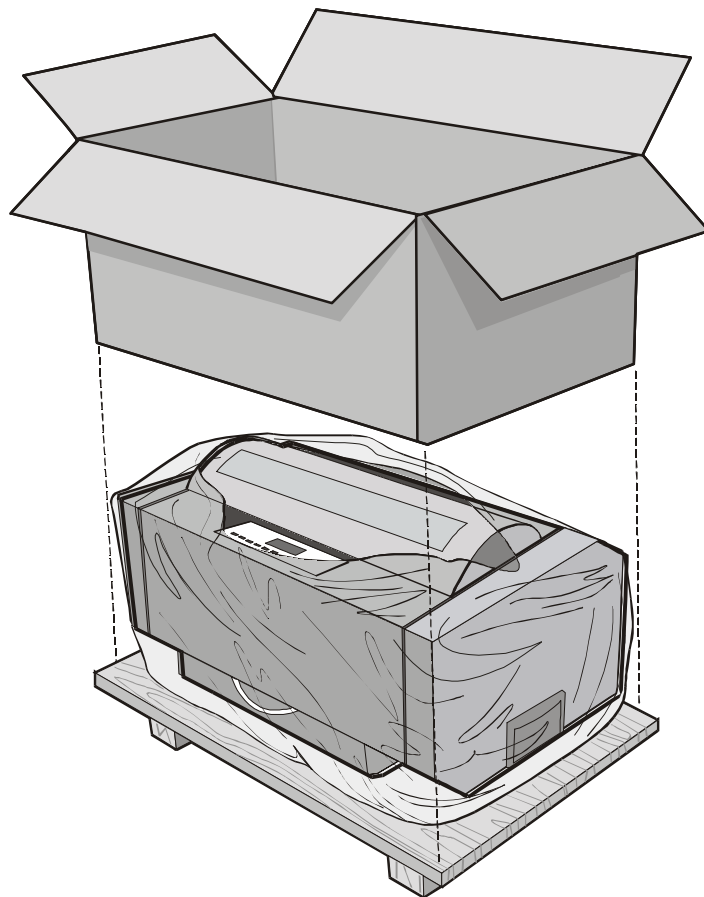
If you need to ship your printer, it is necessary to repack it to avoid damaging during the transport. Proceed as follows:

When repacking the printer always use the original packing material.

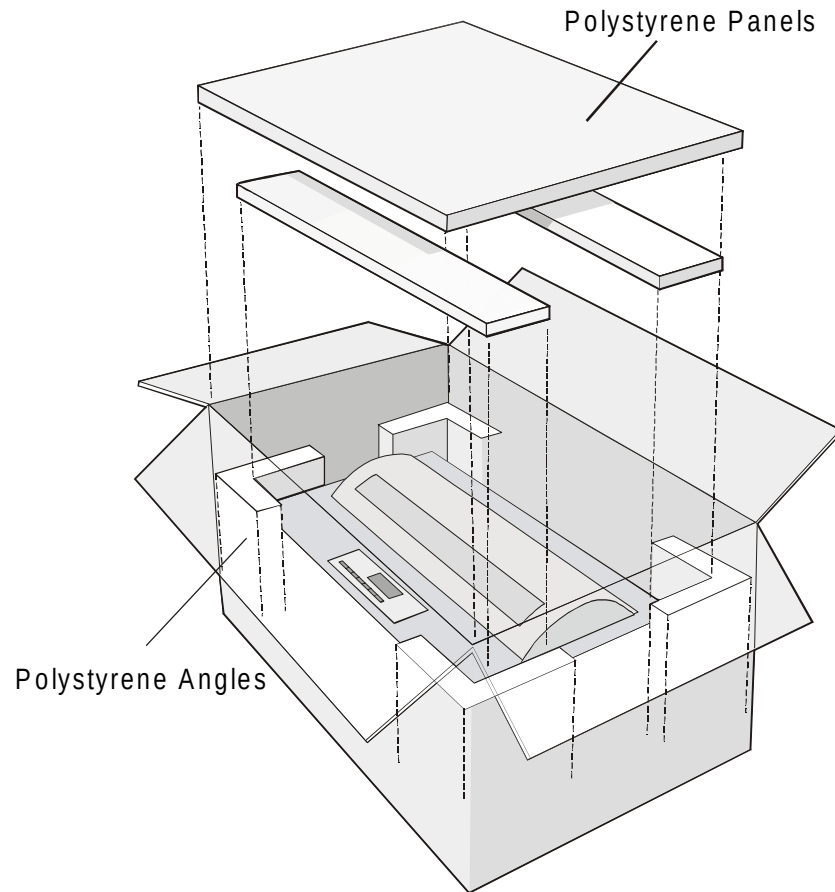
1. Find the packing material and the repacking kit.
2. With the help of another person move the printer onto the transport foam on the transport pallet.



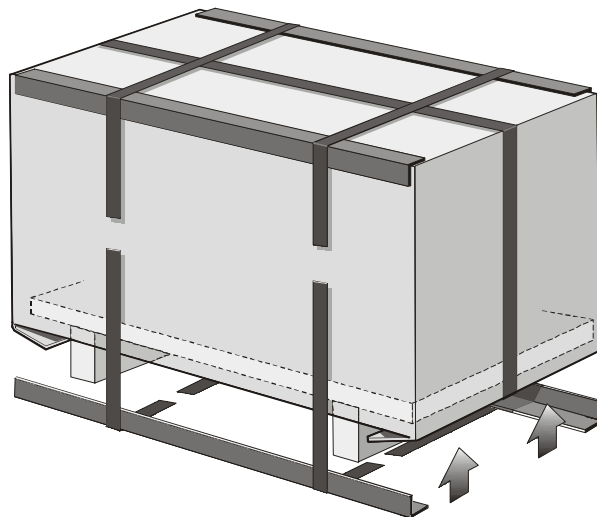
3. Insert the plastic bag over the printer and slide the packing box over the printer.



4. Insert the four polystyrene angles into the packing box and the polystyrene panel onto the printer.



5. Insert the printer accessories onto the polystyrene panel. Close the packing box and fix it to the transport panel by means of the packing strip, inserting the plastic angles between the packing strip and the carton.



6. Fix the packing ribbon with the corresponding clips.

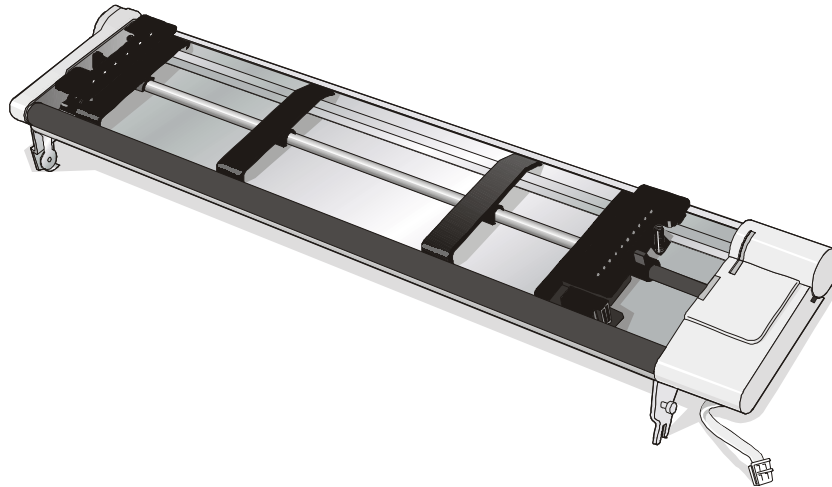
Options

The Front2 Push Tractor Assembly

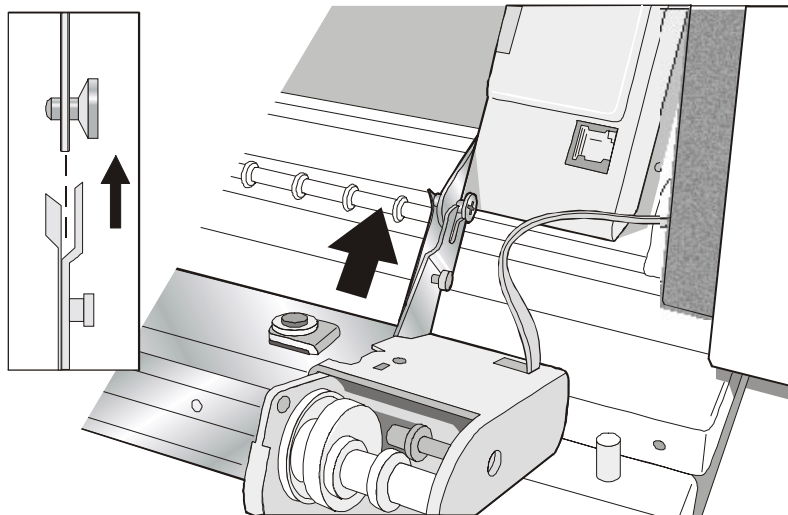
An optional second push tractor assembly (1A3003B11) can be installed on the printer. This tractor assembly allows the handling of a second fanfold paper.

Installing/Removing the Front2 Push Tractor Assembly

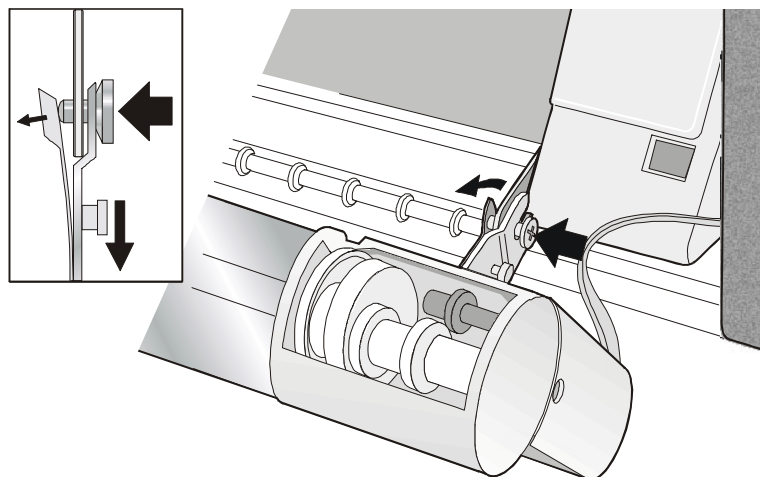
This Front2 push tractor assembly can be installed on the Front1 push tractor.



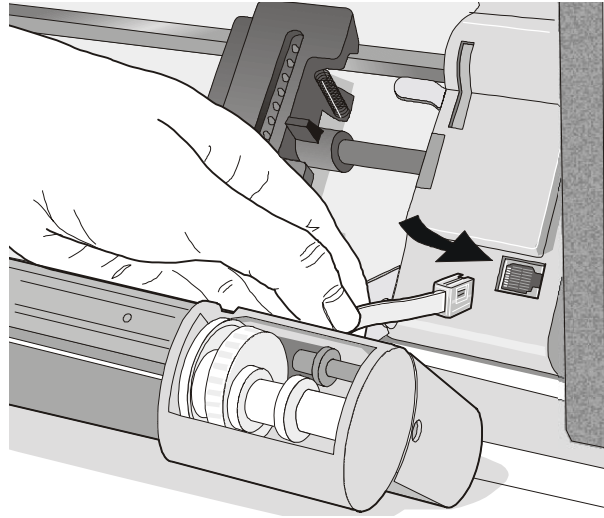
1. Align the hooks on both sides of the Front2 tractor with the pins on the Front1 push tractor.



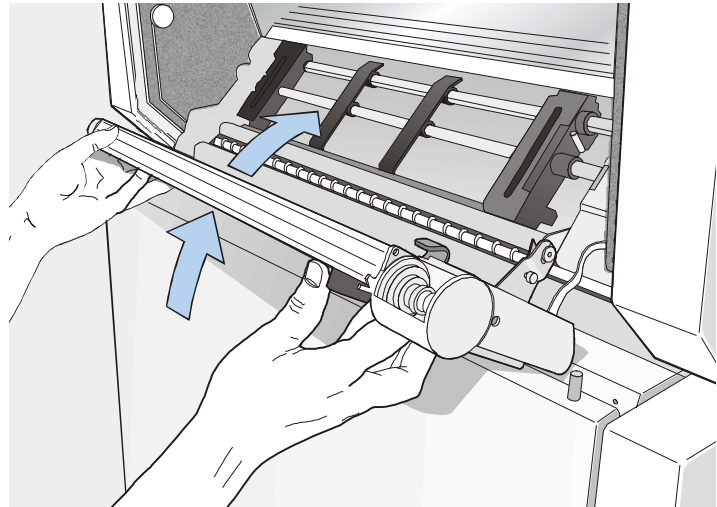
2. Push the Front2 tractor until it is fully engaged.



3. Insert the connector cable in the electrical connector located in the lower push tractor.

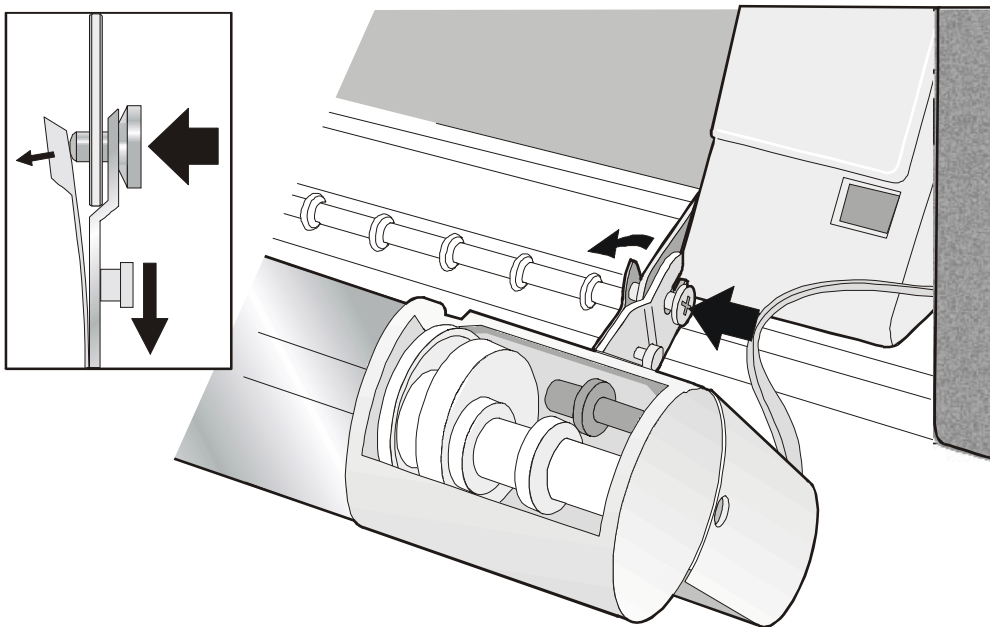


4. Rotate the Front2 push tractor onto the Front1 push tractor.



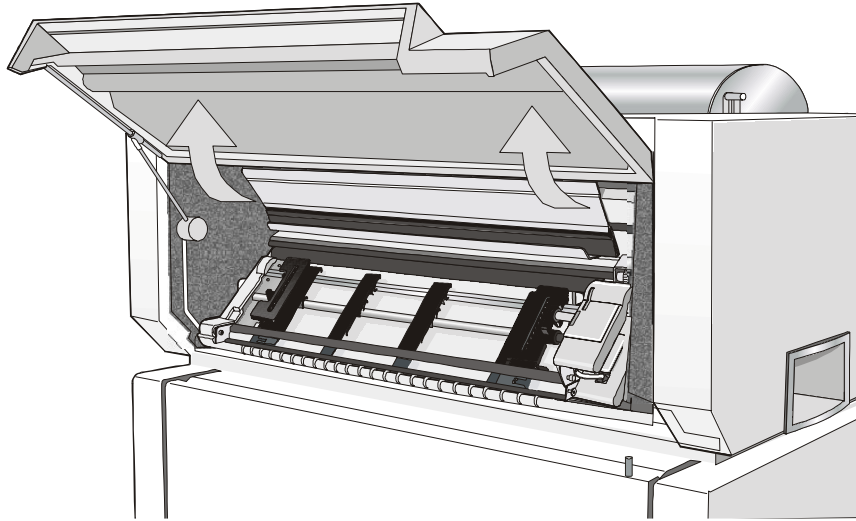
If you need to remove the Front2 Push tractor assembly:

1. Turn the printer off.
2. Disconnect the connector cable and press on the push buttons to disengage the Front2 tractor assembly.

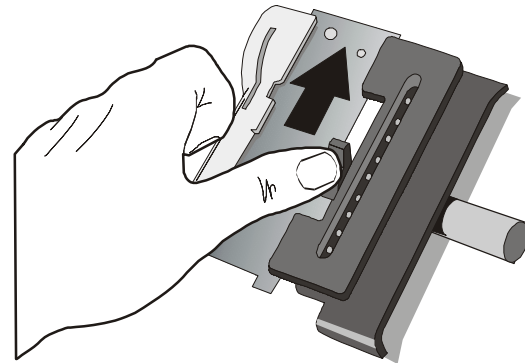


Loading Paper Using the Front2 Push Tractor Assembly (Option)

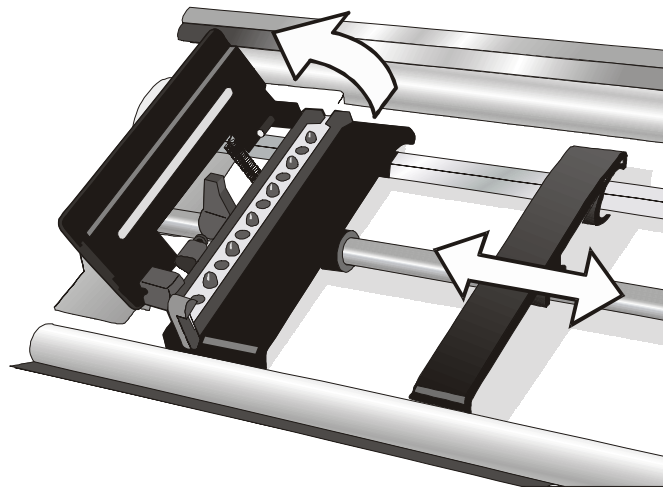
1. Open the tractor area cover turning it upwards until it stops.



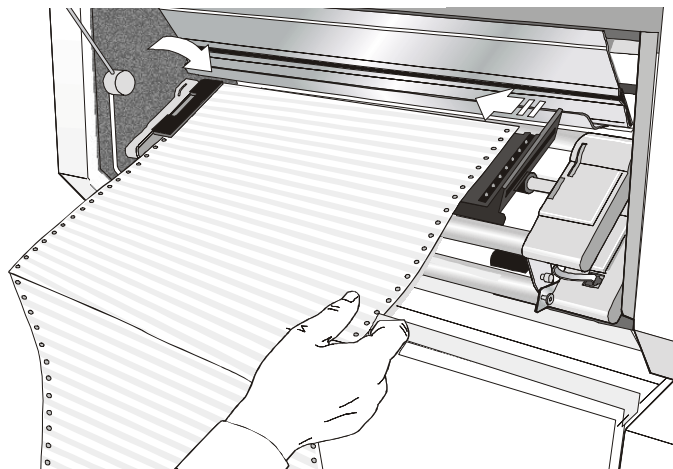
2. Unlock the tractor sets of the Front2 tractor assembly moving the levers up.



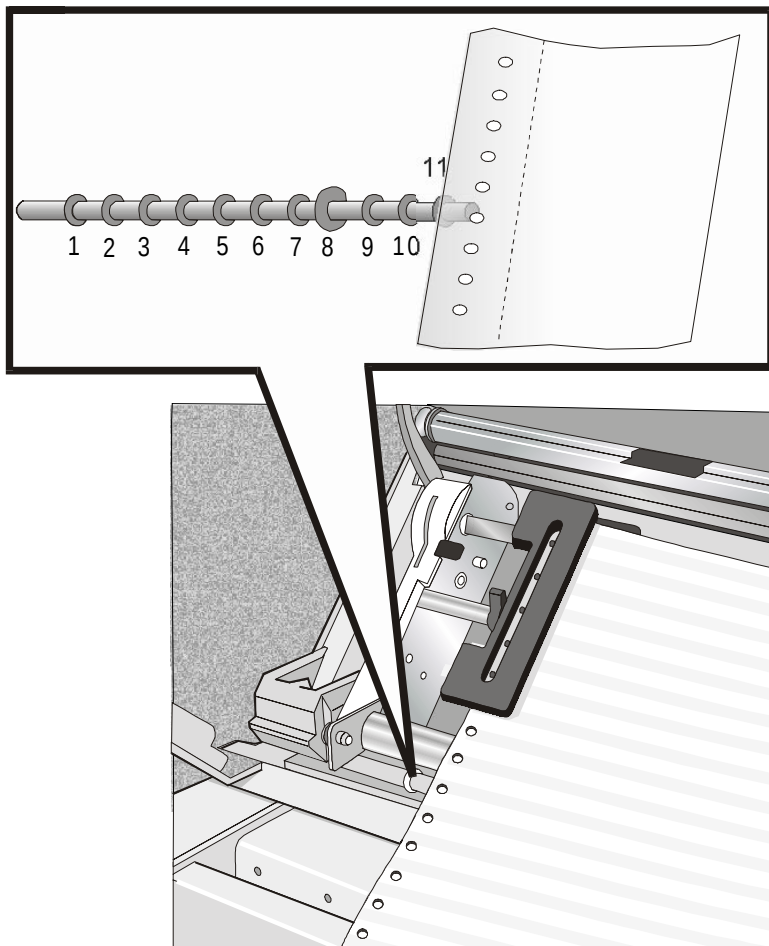
3. Space the paper guides along the tractor bar. Open the left and right tractor set covers.



4. Hold the fanfold paper in front of the tractor sets and insert the paper perforation on the left tractor set pins and close the left tractor set cover.
5. Insert the paper on the right tractor set pins, make sure the paper goes under the paper sensor and close the right tractor set cover.

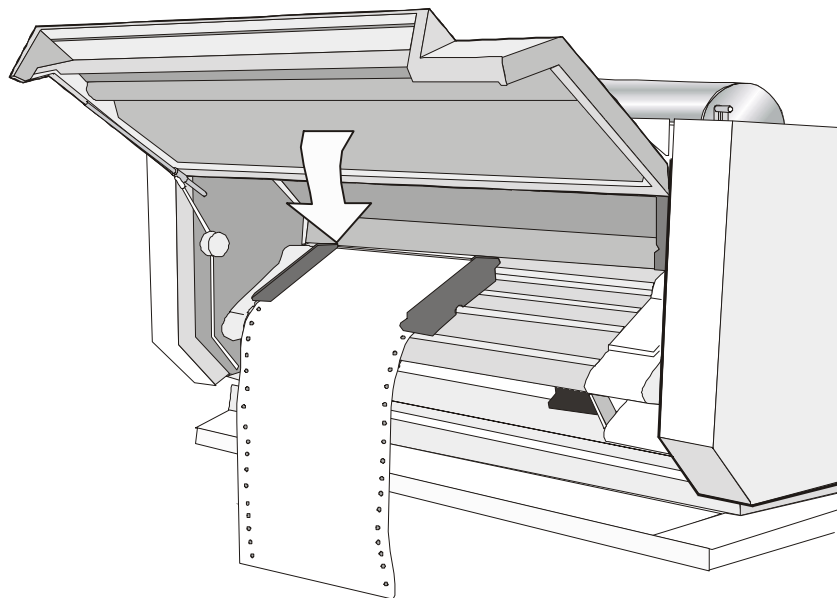


6. Position the left tractor set for printing, matching the left paper margin with the eleventh notch on the printer cabinet and lock it in place.



7. Adjust the right tractor set gently to remove slack from the paper.

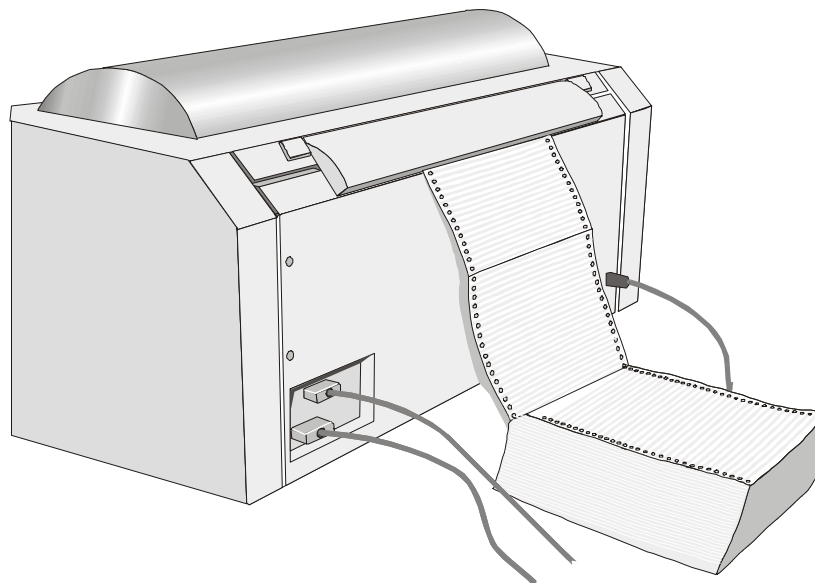
8. Close the tractor area cover.



9. Press the LOAD/FF key to load the paper into the printer.
To select the Front2 Push paper path, press the PATH key until the Front2 led is turned on.
The paper will load automatically to the first print line position.
If paper does not load automatically, then press the LOAD/FF key and the LCD displays:

LOAD PAPER: FRONT2

The printed paper is ejected from the rear of the printer.



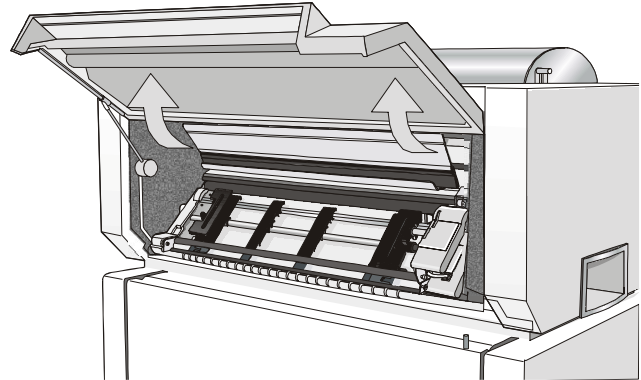
If paper starts to load but is not successful, and the error message **PAPER OUT: FRONT2** is displayed, then the paper sensor may require 'tuning' to the ambient lighting conditions in your office (the paper sensors used are light sensitive devices and improve paper loading accuracy).

Please refer to **Tuning the Paper Sensors** in the *Initial Set-Up Menu*.

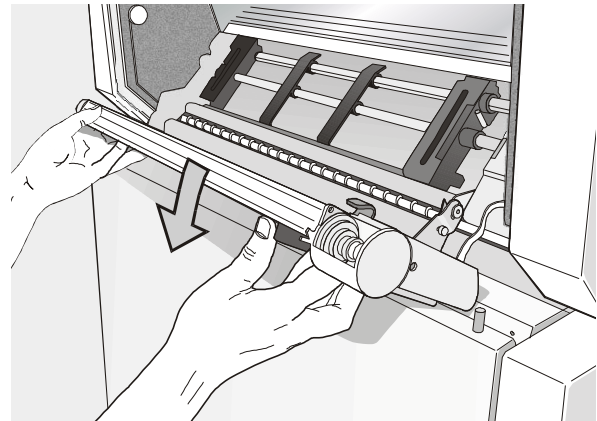
Loading Paper Using the Front1 Push Tractor Assembly when the Front2 Push Tractor Assembly (Option) is Installed

When the Front2 Push tractor assembly is installed and you need load paper on the Front1 Push tractor assembly follow this paper loading procedure:

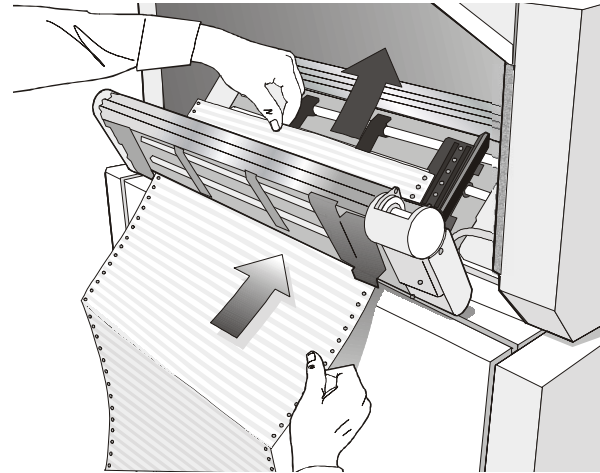
1. Open the tractor area cover turning it upwards until it stops.



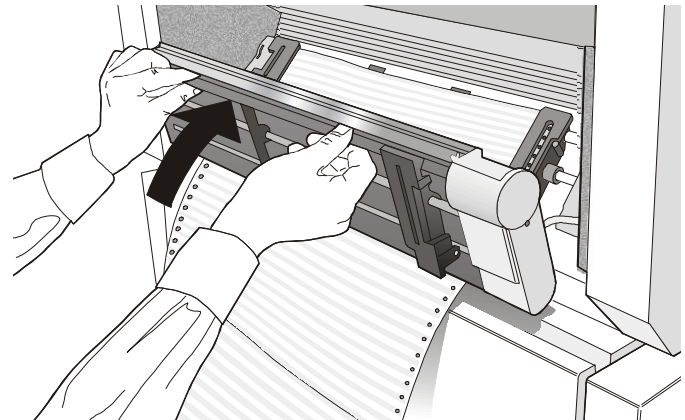
2. Rotate the Front2 Push tractor assembly outside of the printer.



3. Insert the fanfold paper between the Front1 and the Front2 Push tractor assemblies then proceed to load the paper as described in the **Loading Paper Using the Front1 Push Tractor Assembly** follow steps 2 through 8.



4. When the fanfold paper has been loaded on the Front1 Push tractor assembly, reposition the Front2 Push tractor assembly in its initial position before closing the tractor area cover.



5. To select the Front1 Push paper path, press the PATH key until the Front1 led is turned on (the Front 2 led turns off). The paper will load automatically to the first print line position. If paper does not load automatically, then press the LOAD/FF key and the LCD displays:

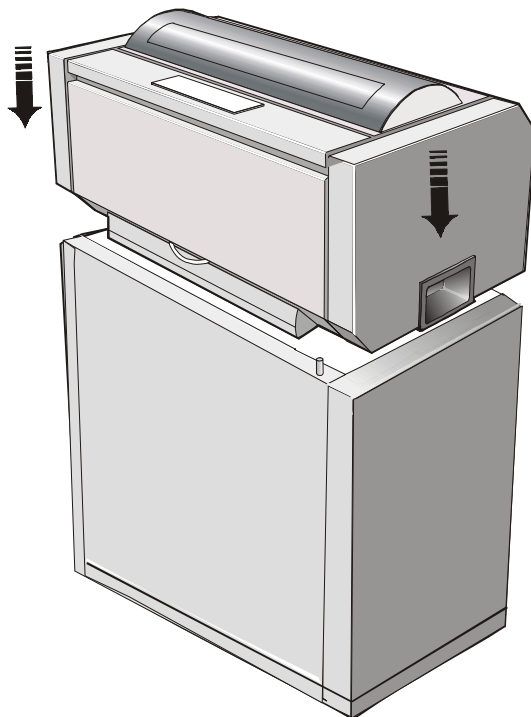
LOAD PAPER: FRONT1

Printer Cabinet

A cabinet option (1A3003B13) is available as perfect support for the printer and improves the printer paper handling.

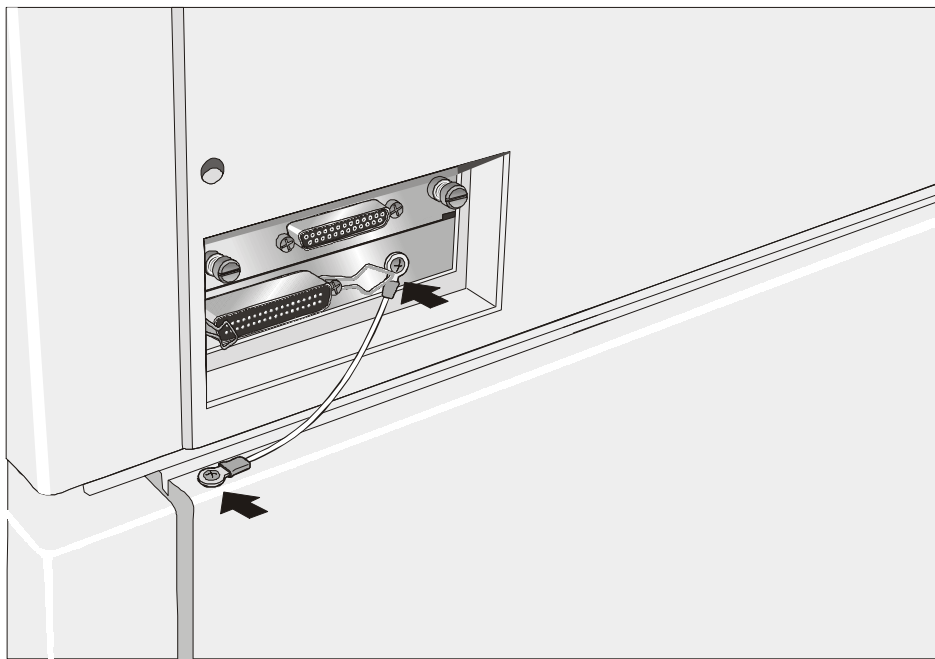
Installing the Printer on the Cabinet

1. For the assembly of the cabinet, please refer to the instructions you receive together with cabinet option.
2. With the help of another person, move the printer onto the cabinet.



Connecting the Ground Cable

Connect the ground cable on the rear of the printer to the cabinet.



Do not forget to disconnect the ground cable if you need to repack the printer for shipment.

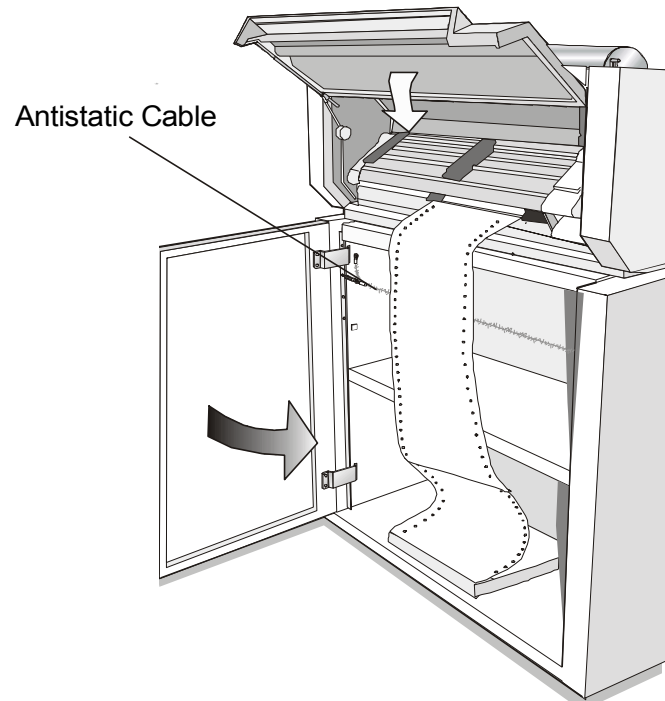
Paper Handling with the Printer Cabinet

The cabinet is provided with two inner shelves to lay the paper staples.

Positioning the Paper Staple Loaded on the Front1 Push Tractor Assembly

After loading the paper in the Front1 tractor assembly (see the [Loading Paper Using the Front1 Push Tractor Assembly](#) section described before):

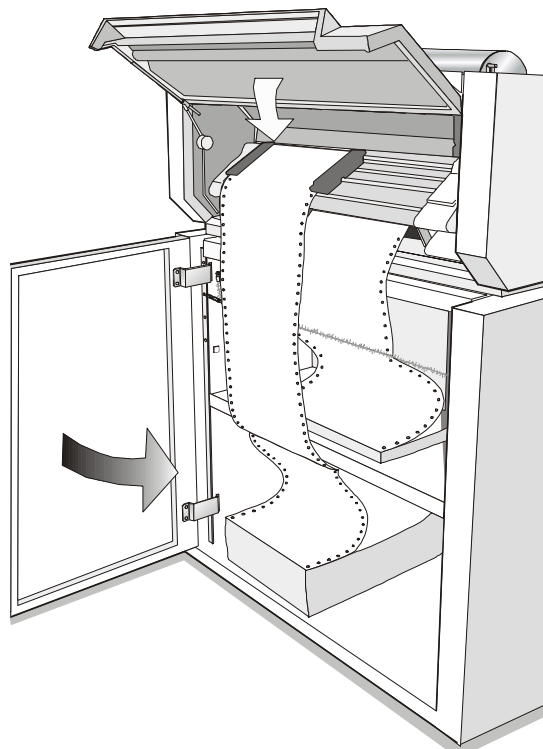
1. Open the cabinet door and
 - Lay the paper staple onto the lower shelf if you are using only one paper staple. The paper must be fed in front of the antistatic cable;
 - or
 - Lay the paper staple onto the upper shelf (the paper staple must be without the paper packing or with the front packing side removed) if you are going to install a second paper staple. The paper must be fed behind the antistatic cable and
2. Close the printer cabinet door and the tractor area cover.
3. Press LOAD/FF key to load the paper into the printer.



Positioning the Paper Staple Loaded on the Front2 Push Tractor Assembly

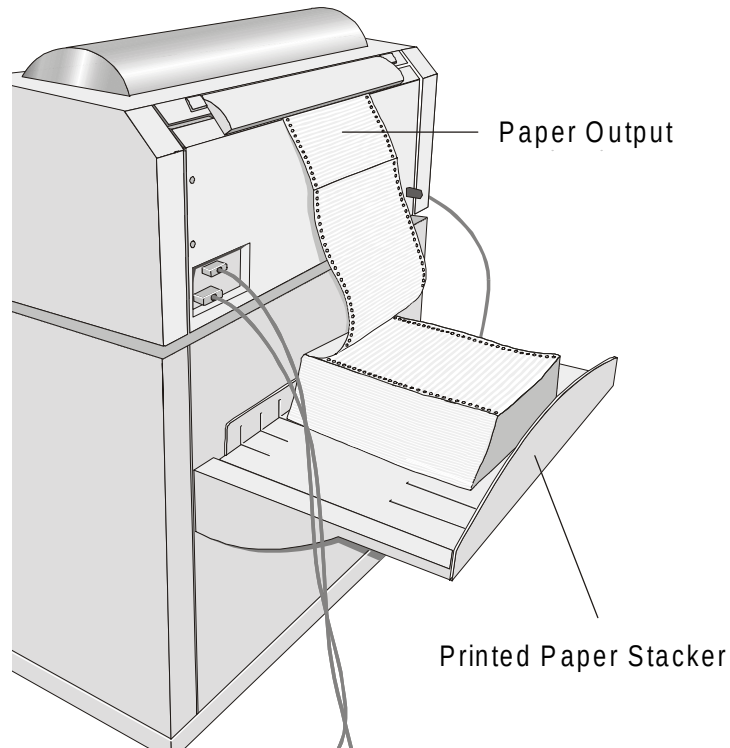
After loading the paper in the Front2 tractor assembly (see [Loading Paper Using the Front2 Push Tractor Assembly \(Option\)](#)):

1. Open the cabinet door and lay the paper staple onto the lower shelf.
2. Close the printer cabinet door and the tractor area cover.
3. Press LOAD/FF key to load the paper into the printer.



Stacking the Printed Paper on the Printer Cabinet

The printed paper is ejected from the rear of the printer and can be stacked using the rear stacker of the cabinet.



LAN Interface Board

A LAN Interface board is available for the network connections through an integrated Ethernet 10/100 Base-T interface, which coexists with the parallel interface.

For the installation of this board, please refer to the *Installation Guide* (GEK-01057) you receive together with the Ethernet 10/100 Base-T board option (1A3000PRA).

Printer Specifications

Printing Characteristics

Print Head	
Matrix	18 pins
Print Head Life	700 mil characters (draft)

Print Speed (cps)					
	Draft		Quality		DP Text
10 cpi	Normal	800	LQ	240	480
	High Speed	1100	-		-

Throughput ECMA 132 (pages/hour)					
	Draft		Quality		DP Text
10 cpi	Normal	680	LQ	350	560
	High Speed	730	-		-

Character Matrix (dots per inch)

	HS Draft	Draft	LQ	DP Text
10 cpi	9 x 9	12 x 9	20 x 18	20 x 9
12 cpi		10 x 9	20 x 18	20 x 9
15 cpi		10 x 9	20 x 18	20 x 9
17,1 cpi		12 x 9	20 x 18	20 x 9
20 cpi		12 x 9	20 x 18	20 x 9

Character Pitch (characters per inch)

Basic	10 - 12 - 15
Compressed	16.7 - 17.1 - 20
Double-Wide	5 - 6 - 7.5 - 8.3 - 8.5
Other	Proportional

Vertical Spacing (lines per inch)

Basic	2,3,4,6,8,12
Incremental (inch)	n/72, n/144, n/216

Bit Image Density (dot per inch)

Horizontal	240, 144, 120, 90, 80, 72, 60
Vertical	144, 72

Print Styles

Draft - Courier - Gothic - OCR A - OCR B - DP Text - HS Draft

Bar Codes

UPC-A, UPC-E, EAN-8, EAN-13, UPC-EAN 2, UPC-EAN 5, MSI Plessey, Code 128, Code 11, Code 93, Codabar, 2/5 Bidirectional, 2/5 Interleaved, 2/5 Industrial, 2/5 Matrix, Postnet, Code 39

Emulations

- EPSON FX

- IBM XL III

GENICOM ANSI x3.64

Characters Sets	
Standard PC IBM Character Sets	CS1 and CS2
EPSON Italic Character Set	
EPSON National Variations	USA, France, Germany, United Kingdom, Denmark-1, Sweden, Italy, Japan, Spain-1, Norway, Denmark-2, Spain-2, Latin America, Korea, Legal, Netherlands, Anglo-Universal, Spanish-America, Portugal, Africa, Switzerland, Turkey, Greece, Yugoslavia, Cyrillic
Character Codes Tables	USA/Western Europe (CP437), Multilingual (CP850), Greek (CP851), Eastern Europe (CP852), Turkish (CP853), Russian (CP855), Euro PC Multilingual (CP858), Portugal (CP860), Canada/France (CP863), Arabic (CP864), Arabic (CP864E) Denmark/Norway (CP865), Cyrillic (CP866), Turkish2 (CP867), Mazowia (Polish), Turkish, Greek, Kamenicky, CWI, Roman-8, IN2, ISO 8859/1 (USA/Western Europe), ISO 8859/2 (Eastern Europe), ISO 8859/3 (Southern Europe), ISO 8859/4 (Northern Europe), ISO 8859/5 (Cyrillic), ISO 8859/6 (Arabic), ISO 8859/7 (Greek), ISO 8859/8 (Hebrew), ISO 8859/9 (Western Europe2), ISO 8859/15 (USA/Western Europe), Central Europe (CP1250)
ANSI National Variations	USA, German, French A, French B, French/Canadian, Netherlands, Italian, United Kingdom, Spanish, Danish/Norwegian A, Danish/Norwegian B, Danish/Norwegian C, Danish/Norwegian D, Swedish/Finnish A, Swedish/Finnish B, Swedish/Finnish C, Swedish/Finnish D, Switzerland, USA (ISO), Yugoslavia, United Kingdom, Turkey, Greece, Cyrillic

Paper Handling

Base Configuration

1 FRONT1 TRACTOR

Fanfold Width:	76 to 432 mm (3 to 17 inches)	Fanfold Length:	76 to 609 mm (3 to 24 inches)
Copies:	1 original + 7 copies	Max. Thickness:	0,635 mm (0.025 inches)
Weight (g/m ²)	Original: 55 to150 Other Sheets: 45 to 75 Carbon Paper: 35		

Configuration with Optional Front2 Tractor

1 FRONT2 TRACTOR

Fanfold Width:	76 to 432 mm (3 to 17 inches)	Fanfold Length:	76 to 609 mm (3 to 24 inches)
Copies:	1 original + 7 copies	Max. Thickness:	0,635 mm (0.025 inches)
Weight (g/m ²)	Original: 55 to150 Other Sheets: 45 to 75 Carbon Paper: 35		

Standard Functions

- Automatic print head gap adjustment (AGA)
- Automatic paper path switching via operator panel or S/W commands
- Paper parking
- Bar Code printing
- Automatic fanfold positioning for tear-off
- Setting and storage of paper format and print conditions for each paper path in the non volatile memory

Physical and Electrical Characteristics

Interfaces	
Parallel	Centronics - 36 pin Amphenol connector
	Receive Buffer: max. 32 Kbytes
Serial	RS-232/C and RS-422/A - dB 25 connector
	Baud Rate: 300 to 38400 bps, DTR & XonXoff flow
	Receive Buffer: max. 32 Kbytes
Automatic interface switching	

Reliability Requirements	
MTBF	Mean Time between failure: 10000 hours at 25% DC
MTTR	Mean Time To Repair: 30 minutes
Workload	64000 pages/month (ECMA 132 - 4 hours for 22 days)
Printer Life	5 years or 10000 hours @25%
Duty Cycle	Operating: no limitations

Power Supply	
UNIVERSAL	From 100 to 230 VAC -10 ÷ +15% 50/60 Hz ± 2 Hz
Power Output	Max. 215 W
Power Consumption	Standby: < 30 W ---- Average Printing: 120 W

Noise Level

< 56 dBA

Environment Conditions

Storage Conditions

	Temperature	- 40° to 50° C
	Relative Humidity	10% to 90% RH (non condensing)

Operating Conditions

	Temperature	10° to 38° C
	Relative Humidity	10% to 90% RH (non condensing)

Paper Conditions

	Temperature	16° to 24° C
	Relative Humidity	40% to 60% RH (non condensing)

Physical dimensions - Printer

Height	350 mm (13,77 inches)
Width	720 mm (28,34 inches)
Depth	400 mm (15,75 inches)
Weight	33 kg

Physical dimensions – Printer Cabinet Option

Height	printer table: 666 mm (16,92 inches)
	paper stacker: 512 mm (13,01 inches)
Width	726 mm (18,44 inches)
Depth	without paper stacker: 522 mm (13,26 inches)
	with paper stacker: 790 mm (20,17 inches)
Weight	40 kg

Consumables

Black 20 MC Ribbon	1A3000B05
Color Ribbon	1A3000B06

Options

2° Push Tractor Assembly	1A3003B11
Printer Cabinet	1A3003B13
LAN Interface Board	1A3000PRA

Compliance Statements

FCC Compliance Statement (USA)

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note the following:

- The use of a non-shielded interface cable with the referenced device is prohibited.
- The length of the parallel interface cable must be 3 meters (10 feet) or less.
- The length of the serial interface cable must be 15 meters (50 feet) or less.
- The length of the power cord must be 3 meters (10 feet) or less.

Compliance Statement (Canada)

This digital apparatus is in conformity with standard NMB-003 of Canada.

Cet appareil numérique est conforme à la norme NMB-003 du Canada.

Übereinstimmungserklärung (Deutschland)

Bescheinigung des Herstellers/Importeurs:

Hiermit wird bescheinigt, dass der Drucker der Maschinenlärminformationsverordnung 3. GSGV, 18.01.1991 entspricht: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß EN27779-1991.

Compliance Statement (Europe)

Warning

This product meets the interference requirements of EN55022. In a domestic environment, this product may cause radio interference in which case, the user may be required to take adequate measures.

Energy Star

As an ENERGY STAR® Partner, GENICOM has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. The International ENERGY STAR® Office Equipment Program is an international program that promotes energy saving through the use of computers and other office equipment. The program backs the development and dissemination of the products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment such as computers, displays, printers, facsimiles and copiers. Their standards and logos are uniform among participating nations.

International Compliance



EN55022:1998	Emissions Series
EN 61000-3-2:1995	Power line harmonics
EN 61000-3-3:1995	Power line flicker
EN55024:1998	Immunity Characteristics
EN61000-4-2:1995	E.S.D.
EN61000-4-3:1995	Radiated Susceptibility
EN61000-4-4:1995	E.F.T
EN61000-4-5:1995	Surge
EN61000-4-6:1996	R.F. Common mode
EN61000-4-11:1994	Voltage dips and interruptions

Trademark Acknowledgements

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